# THE HUMAN ELEMENT IN THE SECURITY MARKETS

ELMER S. WRIGHT

80004

# THE HUMAN ELEMENT IN THE SECURITY MARKETS

By

Elmer S. Wright

Graduate Division

Boston University

The College of Business Administration

Boston, Mass.

# INTRODUCTION

A great deal of material has been written concerning finance and the market for securities, and in recent years much has been said about stock market psychology. But few have taken the time to analyze the real meaning of stock market and business psychology. In most cases it is talked of as a sort of an intangible element; something apart from individuals but at the same time closely allied with them. With this in mind the present study has been undertaken, in order to ascertain, if possible, just how the behavior of individuals effects the market for securities, the relation of the emotions to these activities, and how these traits frequently are capitalized.

Someone has said that while the United States is the richest nation so far as wealth is concerned, in the matter of economic knowledge, it is one of the poorest. This also may be applied to knowledge of the "human element" in business and finance. People recognize that certain situations bring about certain results, but few take the trouble to study the causes, so that when history repeats itself, as it invariably has in the past, they make the same mistakes. The fact that time has brought repetition of human events should in itself be a matter of consideration in the cycles of business, stock prices and commodity price movements, for those who use these mediums for investment of surplus funds.

INTRODUCTION

A great deal of material has been written concerning [illegible] and the extent [illegible], and in recent years much has been said about [illegible]. But few have taken the time to analyze the real meaning of [illegible] psychology. In most cases it is thought of as a sort of [illegible]: something which [illegible]. With this in mind the present study has been undertaken, in order to ascertain, if possible, just how the [illegible] of individuals [illegible], the [illegible] of the [illegible], and how these [illegible].

[illegible] as far as [illegible], in the [illegible] knowledge. It is one of the [illegible]. [illegible] knowledge of the "[illegible]" [illegible] recognize that [illegible] about [illegible] [illegible]. [illegible] they [illegible]. The fact that [illegible] of [illegible] in the [illegible] of [illegible].

The writer has had a number of years experience in observing the reaction of individuals to stock market fluctuations and through personal attention to thousands of letters from investors has been able to associate to a considerable extent the connection between the elements of human behavior and the so-called business cycles and stock market movements. People express most of the psychological factors through their correspondence, and it is noticeable that people unconsciously reflect courage or lack of it, strength or weakness, fear and its close relative, anxiety; as well as other human traits in their letters, particularly those which deal with their investments. In order to arrive at conclusions, however, it is necessary to trace the growth of the market for securities and study the reaction of individuals and groups of individuals under various impulses.

CONTENTS

The development of markets.

Barter and exchange. Manorial system in England. International relations. Establishment of currency. Clearing houses.

The rise of the security exchanges.

Government financing. Early stock companies. Speculation and its connection with securities. Early forms of speculation. New companies. Management. Speculation and swindles. Speculation and gambling. Speculation and investment. Economic changes, business cycles. New forms of enterprise. Trusts. New industries. Effects of credit expansion on securities. Unusual aspects of stock speculation. The stock broker and his influence upon securities. The law of supply and demand.

Psychology and its relation to the security markets.

What is psychology? The individual. General intelligence. Learning ability. Habit and memory. Most investors have short memory. Instincts of collecting, rivalry, possession. Instincts very noticeable in security markets. Emotions, fear, rage, love. Effects of emotions. Fear most noticeable in security market. Crowd or mob psychology. Morale. Suggestion. Nearly everyone is suggestible. Suggestion used by promoters and stock manipulators. Individual differences. Include environment, or social point of view, biological, pathological, glandular and quantative. Attention, interest and will. Heredity and environment. Psychological tests.

Other effects of the human element upon securities.

Reflected in volume. Classes of stocks. Common stocks fluctuate more widely than preferred stocks or bonds. Exceptions. Nature of the business. Railroads, public utility and industrial companies. Mining and oil stocks. Indexes. What brings a turn in a liquidating movement? Bonds. Safety sometimes overemphasized. Increase of convertible feature.

Conclusions. Market for securities essential in present economic life. Regulation necessary. Education. Analyzing financial statements. The future.

THE HUMAN ELEMENT IN THE SECURITY MARKETS.

The development of markets. The development of economic life to its present complex status has resulted in a gigantic institution, the market for securities. This growth has not been a matter of few years, but of centuries. True, the market for securities as we know it, has developed in a comparatively few years, but the principles behind it date as far back as history is recorded. From the beginning of the human race there has been barter and exchange. With the growth of the races, development of industry has been accompanied, step by step, by the constant expansion of markets which could distribute the products of industry. Even in Africa the savages are accustomed to market places. The battered temple pylons of ancient Egypt, show us the fisherman, the weaver, the potter, the farmer, and the metal worker bartering their several products in market places centuries before currency was invented. Long before Solon instituted the Athenian coinage system, the fisherman from the Piraeus bartered his fish for the barley of the Attican farmers. Such, too, was the origin of the great Forum of Rome.* The growth of the British empire also aided materially the development of domestic and world markets.

Under the manorial system which prevailed in England prior to the Norman Conquest, and which did not entirely disappear until the sixteenth century, each manor produced practically everything needed by its inhabitants. Nobles borrowed occasionally from one another, but commercial credit as we understand it, was unknown.

* Meeker, The Work of the Stock Exchange, page 30.

In fact, even coined money played a relatively unimportant part. The towns that harbored the comparatively small amount of trade, used money to some extent to transact some of their business with the surrounding country, but in the earlier centuries practically all business was carried on the the form of barter. A greater use of metallic money was the forerunner of the introduction of credit. In the feudal system, the lord of the manor owned the land and the work was performed by his subjects. The respective rights and duties of the lord and the subject were defined by immemorial usage. They both received their shares of the product of the land and labor in material goods, which they exchanged in the towns for anything they happened to lack. The modern American fair is an outgrowth of the early English fairs, which were originated to facilitate exchange of products. Only in the towns were coins used to any extent. International relations were mostly in the form of war; foreign trade being practically unkown until the latter centuries of the feudal era. In about the thirteenth century, however, a demand arose on the continent for English wool. This international trade, at first only with nations located nearby, brought gold and silver into England and a greater use of money resulted; first in the port cities, then the towns, then the villages, and finally the use of money increased the trade between the manors and the towns.

This change from the barter method of the manorial system of the thirteenth century of the money method of the sixteenth,

In fact, even cattle [illegible] relatively unimportant [illegible]. The lords then harvested the comparatively small amount of [illegible], used mainly to some extent in [illegible] with the surrounding country, and in the earlier centuries practically all business was carried on in the form of barter. A greater use of metallic money was the forerunner of the [illegible] in the feudal system. The lord of the manor owned the land and the work was performed by his vassals. Their respective rights and duties of the land and its produce were [illegible] by [illegible] usage. They [illegible] received [illegible] of the produce of the land and labor in [illegible] goods, which they [illegible] for anything they needed in turn. [illegible] an outgrowth of the early English [illegible] in facilitating exchange of products. [illegible] were [illegible] used to any extent. International exchanges were mostly in the form of [illegible] foreign trade being [illegible] almost wholly in the [illegible] countries of the Netherlands. Through the thirteenth century, however, a demand grew up on the continent for English wool. This international trade, [illegible] only with [illegible] foreign [illegible], gold and silver [illegible] a greater use of money [illegible]: first in the [illegible], then the [illegible], then the [illegible], and finally the use of money increased the [illegible] between the [illegible] and the towns.[14]

This change from the earlier method of [illegible] system of the thirteenth century of the money [illegible].

was quite gradual during several hundred years. As commerce grew in importance and political conditions became more stable, the practice of granting credit naturally increased. Bills of exchange were introduced first by the Jewish merchants of Florence to avoid the unnecessary transportation of money and later as a means of concealing and safe-guarding their wealth. By the middle of the seventeenth century the business men of London had developed business methods that would seem quite familiar to us if we could transport ourselves back into that period.*

The establishment of currency made trade easier between individuals of the same nation, but trade between nations even then encountered many difficulties. The currency of one country was vastly different from that of another country, so there grew up a kind of clearing house system, in which the money changers balanced the various currencies. The biblical story of Christ driving the money changers out of the temple is an illustration of this development. As nations gradually became at peace with each other, however, financial clearings became more systemic, until the present day exchange among nations involves billions of dollars.

The rise of the security exchanges. With the growth of the security method of financing, it is natural that a market of some kind should develop to handle the business of those who wished to sell their certificates. The early

* Adapted from address of John E. Rovensky, vice-chairman The Bank of America, on "Panics and Prophets," before annual banquet of the Engineers' Society, Scranton, Penna, Jan. 29,1931.

was rather general during several centuries, which the new gave to Lombards the religious scruples ... which the practice of granting credit, ... Bills of exchange were introduced first by the ... merchants in Flanders to avoid the unnecessary transportation of money, and later as a means of cancelling and set-off their credits. By the middle of the seventeenth century the business men of London had developed banking methods that would seem quite familiar to us if we could transport ourselves back into that period.

The establishment of currency made trade easier between individuals of the same nation, but trade between nations even then encountered many difficulties. The currency of one country was vastly different from that of another country, so there grew up a class of clearing-house bankers, in which the money changers balanced the varying currencies. The biblical story of Christ driving the money changers out of the temple is an illustration of this development. As nations gradually became at peace with each other, however, financially clearing houses were developed, until the turn of the nineteenth century, pairing involved ... of nations.

The rise of the credit instrument. — With the growth of the monetary system of financing, it is natural that a market of some kind should develop to enable the business of those with capital to unite their ... The early

[illegible]

security markets were not the large and far-reaching organizations of today, of course, but the London Stock Exchange was for many decades the largest institution of its type in the world, due to the earlier development of stock companies in that country and the worldwide expansion of the British Empire. The strategic position of the port of New York early gave indications that this would be one of the important market places of the new nation. On May 17, 1792 twenty-four brokers subscribed to the original brokers' agreement. This was the first organized stock market in New York. The brokers met under a buttonwood tree at what is now 68 Wall Street. On March 8, 1817 the members adopted a constitution and the name of "New York Stock and Exchange Board". The name was changed to the New York Stock Exchange on January 29, 1863. On April 8, 1817, the organization moved indoors, renting a second floor room at 40 Wall Street. They subsequently moved some ten or twelve times before locating on their present site at the corner of Broad and Wall Streets.

It was in the bond market, however, that the real foundation of the present Stock Exchange lies, for it was to provide a market for the first securities of the United States which were authorized by the first Congress in 1790 that brokers assembled under the traditional buttonwood tree. Since that time the growth of the market for bonds and similar evidences of corporate and governmental debt has been steady and, at times,

securities markets grew [illegible] New York and [illegible]

organizations [illegible] the [illegible] Stock

Exchange was for many decades [illegible] of the

[illegible] in the [illegible]

[illegible]

[illegible]. The [illegible] of the [illegible]

York [illegible] indications that [illegible] would [illegible]

[illegible]. On May 17, 1792,

twenty-four brokers [illegible] by the [illegible]

agreement. This was the first organized stock market in New

York. The brokers met under a buttonwood tree [illegible]

Wall Street. On March 8, 1817 the brokers adopted a con-

stitution and the name of "New York Stock and Exchange Board."

The name was changed to the New York Stock Exchange on January

29, 1863. On April 8, 1817, the [illegible]

renting a second floor room at 40 Wall Street. They sub-

sequently moved some ten or twelve times before locating at

their present site at the corner of Broad and Wall Streets.

It was in the [illegible], however, that the real

foundation of the present [illegible] was laid. [illegible]

provided a market for the [illegible] of the [illegible]

which were [illegible]

accumulated [illegible]

than the [illegible]

corporate and governmental debt [illegible]

very rapid. In 1890, just 100 years after the first bonds of the United States Government were issued, trading in bonds on the floor of the New York Stock Exchange for the year totalled in excess of $400,000,000 and in 1922 a little more than a quarter of a century, later, they amounted to more than ten times that sum. Value of memberships rose from $4500 in 1870 to a high of $625,000 in 1929.*

Government financing. Inasmuch as stability of government has been essential in the development of a nation's business, it is natural that this form of financing should begin earlier in history than the more modern corporate financing. The rise of a great nation brought extraordinary expenditures for maintaining an army and otherwise protecting the nation's interests. Too frequently, also, the habits of the reigning monarch were such that taxes were not sufficient to meet the demands. Costly wars depleted financial resources and governments had to borrow to defray expenses. Naturally this form of borrowing has undergone great changes in the last few centuries. Originally most of the principal governments were monarchies, and before national debts managed by parliaments and assemblies were instituted, governmental loans were obtained personally and assumed by the sovereign. The great but troublous reign of Queen Elizabeth was financed through loans made by the Antwerp money-lenders.**
The royal jewels were frequently pawned to finance some enterprise, either worthy or otherwise, according to the whim of the reigning

* Foregoing from N. Y. Stock Exchange Year Book 1929-1930.
**Adapted from The Work of the Stock Exchange, Meeker Page 4

sovereign.

With the French and the American Revolutions came more direct government by the people. Since about 1700, borrowing by governments has been conducted by the sale of interest-bearing certificates of indebtedness to private investors, and practically all of the nations of the world today obtain funds by this method. Of course, the ideal method of financing governments would be to have a perfectly balanced budget, but in order to bring about this happy situation, it would be necessary for the world to be at peace for centuries until all the nations had a chance to pay off war debts, etc., and never to spend more than received through the normal sources of revenue. Various methods have been advanced for clearing up these debts, the most recent being the simple expedient of cancellation. While such a method is not at all popular, especially with the creditor nation, it has not yet been proved that this would not be the most logical procedure. The principle is not essentially different from the individual or corporation that becomes so heavily in debt that the payment of the indebtedness is practically impossible. In that event, bankruptcy and reorganization is necessary. In a like manner, the nation that becomes overburdened with debts faces two alternatives, cancellation or, worse revolution. The economic principle of "charging all the traffic will bear" is just as applicable to national life as to the individual.

Early stock companies. Just as the basis for government financing originated in the early history of the human race, so the stock corporations owe their beginning to the early forms of business endeavor. Simple business partnerships, in which two or more men engage in an enterprise together, are as old as the practice of barter and exchange. But the stock company did not begin to assume its present proportions until after the industrial revolution. This development required more capital than the partnership form of organization could raise to finance the needs of the enterprise. Consequently, the plan was devised whereby a share in the business was sold to disinterested parties.

Probably the most important events leading to the development of the stock company were the discovery of America and the Industrial Revolution. Early attempts were made by Raleigh and other British explorers to establish colonies in the new country, and these were financed through partnerships. Their repeated failure, however, proved that a few wealthy men could not raise sufficient capital to successfully finance these attempts. Accordingly, crude joint stock companies were formed in the early part of the seventeenth century for this purpose.* J. Edward Meeker, economist for the New York Stock Exchange, in his book "The Work of the Stock Exchange", says, concerning this development: "As a result, the first permanent European settlement in this country at Jamestown in 1607 was

* The Work of the Stock Exchange, Meeker, Page 10

**Early stock companies.** [illegible]

government. [illegible] in the early history of the

human race, [illegible] whole [illegible]

to the early period of [illegible]

partnership, in which [illegible]

[illegible]

[illegible]

[illegible]

[illegible]

form of organization [illegible]

enterprises. [illegible]

share in the business [illegible]

Probably the [illegible]

development of the stock company [illegible] of America

and [illegible]

[illegible]

[illegible]

Their reported failure, however, [illegible]

could [illegible]

these attempts. [illegible]

Europe in the early part of the [illegible]

purpose." J. [illegible]

[illegible]

concerning this [illegible]

[illegible]

* The Story of the Stock Exchange, [illegible]

established by the London Company. Financially speaking, the Pilgrim fathers were holders of .labor-shares in a subsidiary of the Plymouth Company, chartered in 1620. The expenses of the initial venture which resulted in our present New England states were borne by the stockholders of this corporation. One share was allotted to each of the Pilgrims and additional shares were sold to them for 10 pounds sterling apiece, so that even in the beginning some of its stock was held in America. Not all the New Yorkers remember that it was from an employee of another ancient corporation, the Dutch East India Company, that the majestic Hudson River derived its name. Indeed, the venerable Hudson Bay Company (or, to use its quaint legal title, 'The Governor and Company of Adventurers of England trading into Hudson's Bay'), which was organized in 1670 and named after the same intrepid explorer, still exists after having played a huge part in the economic development of modern Canada". The French Compagnie des Indes Occidentales, and many similar companies also were formed. With the development of the new world came the necessity of financing transportation systems. At first the canals were regarded as the logical means of transcontinental transportation, but with the invention of the steam engine, the railroad era began. The large amount of money necessary to put a railroad in operation, before a single dollar of revenue could be received, made the

security method of raising capital ideal for this type of business. The greater part of the railroad expansion in this country came in the latter part of the 19th century. Since the beginning of the 20th century there has been little if any railroad construction. Indeed, within the past ten years, the competition of the automobile has brought about the abandonment of many miles of small lines.

Speculation and its connection with securities. Speculation is closely associated with industrial growth. A new industry necessarily entails a large degree of risk. Under our present economic system a new development draws a large number of individuals into the business, many of whom are inexperienced in business generally and in the new industry in particular. The popularity of the radio during and after the world war is a striking example of this point. Many radio manufacturing companies and a large number of radio distributing concerns were organized to meet the demands of this development. Sudden changes in the mechanical device, however, threw many of them into bankruptcy, and in the industrial depression of 1929 and 1930, thousands of radio "sets" were thrown on the market at a fraction of their original price.

That speculation has a place in economic development, however, was brought out by Richard Whitney, president of the New York Stock Exchange, in an address before the Illinois Chamber of Commerce, at the Hotel Stevens, Chicago, on Oct. 10, 1930, when

he said: "Speculation is profoundly important in building up any country, and in establishing high standards of living for everyone. True as this has been at all times in all countries, it has been particularly so in United States, which owes more to speculation than any other nation in History. Conservative saving and investment have been the secret behind the growth of many of the older European countries and have been important factors also in America, but his country has from its very beginning depended upon and benefited by bold and constant speculations of all kinds. It is worth recalling that the North American continent was discovered by the mercantile speculators of Europe, who were trying to discover a short route to the spice islands of the Orient. It was colonized by hardy pioneers who staked not merely their property but even their very lives on the wholly speculative proposition that they could win a better living for themselves in the wilderness of this continent than in the settled communities of Europe. Every great business developed in this country has likewise depended on speculation. Our vast and efficient railways are, of course, an outstanding instance. Our pioneers did not inherit, as did their European contemporaries, well built roads which were the result of centuries of gradual effort. They had to create a vast network of transportation by their own efforts.

"Speculation has not only served our country in the past but

he said: "Speculation is increasingly important in building up any country, and in establishing high standards of living for everyone. Here as with the rest of the world in all [illegible], it has been particularly so in [illegible] nations which owe more to speculation than any other nation in history. [illegible] the [illegible] and [illegible] were the secret behind the growth of [illegible] the other European countries and have been important factors also in America, for this country has [illegible] its great wealth [illegible] and [illegible] by bold and prudent speculations of all kinds. It is worth recalling that the early American colonists were financed by the speculative operations of Europe, who were willing to hazard a great deal in the [illegible] of the orient. It was [illegible] by early [illegible] that [illegible] and even their very lives on the wholly speculative proposition that they could make a better living for themselves in the wilderness of this continent than in the settled communities of Europe. Every great industry developed in this country has likewise depended on speculation. The [illegible] and [illegible] railroads were, of course, an outstanding instance. The pioneers did not [illegible] as did their European contemporaries [illegible] goods which were the result of centuries of gradual effort. They had to create a vast network of transportation by their own efforts.

"Speculation has not only served our country in the past but [illegible]

is still continuing to serve it. New enterprises are constantly arising. Within the past few decades the automovile industry, which today ranks as one of the greatest of our productive enterprises, has been brought from its early beginnings to its present high position largely by capital furnished by speculators. Today we are actually seeing the early stages of the development of aviation. What was a few years ago the amusement of wealthy sportsmen or the business of a few visionaries has, by gradual stages, become an essential of war and a recognized means of high-speed transportation. While the furture is still too uncertain for us to tell when air travel and transportation will become not merely a possibility but a commonplace in our lives, aviation companies are being set up and are asking speculators to furnish the capital which is essential if they are to progress. This capital is furnished not only through the sale of securities, but from other unexpected sources that see a speculative possibility in the further development of aviation. In the last few years both the North and South Poles have been surveyed from the air, but few people realize that a large part of the funds necessary to finance these various flights was contributed by scientific societies, which anticipated the importance of the discoveries to be made, and by our newspapers which foresaw the news value of the experience these explorers

might have.

"If we are to have progress, we must depend upon the speculator to finance the risks involved. Speculation is in fact the price of progress. We may condemn the occasional excesses of speculation, we may censure its wastefulness, but we cannot ignore the fact that the willingness to take large risks for large possible profits has changed this country from a wilderness to the wealthiest nation in the world".

Early forms. The early forms of speculation were not essentially different in character from the more recent ones. The purchasers of an interest in the companies which financed the American colonies were assuming the same degree of risk as the buyer of stocks in modern times, and perhaps greater. The chief difference was in the attitude of the speculator. He recognized the risk and was prepared to take the chances involved. Furthermore, he bought an interest in the enterprise, rather than a share of stock about which he know nothing. Speculation in gold was one of the developments along this line in the history of American finance. *The famous "Black Friday" episode on Sept. 24, 1869 was the result of overspeculation in that commodity.

It is a mistake to think of speculation as being confined to stocks and bonds, however. There frequently have been

* See Twenty Eight Years in Wall St., by Henry Clews, page 181 chapter 21.

"booms" in commodities, sections of land, etc. One of the most famous was the "South Sea Bubble", a financial scheme organized in England in about 1711, and collapsed in 1720.* This scheme was proposed by the Earl of Oxford to fund a floating debt of 10,000,000 pounds sterling, the purchasers of which should become stockholders in a corporation, the South Sea Company, which was to have monopoly of the trade with Spanish South America, and a part of the capital stock of which was to constitute the fund. The refusal of Spain to enter into commercial relations with England made the privileges of the company worthless; but by means of a series of speculative operations and the infatuation of the people, its shares were inflated from 100 pounds sterling to 1,050 pounds sterling. A somewhat similar episode occurred in the period from 1924 to 1925 during the Florida Land boom. Large sections of land were developed into cities and towns. Streets were paved, lighting systems were erected, and the price of lots rose from a few hundred dollars to $30,000 or more. In the subsequent collapse, thousands of land speculators lost their money. Other famous speculations were the Louisiana land boom, speculation in tulip bulbs in Holland 1630 to 1635 and, in the Civil War period, the great railroad speculative era which culminated in the panic of 1873.

* Century Dictionary.

New companies. The stock of a new company necessarily contains a greater degree of risk than one which has become established and has built up a substantial surplus. In the early days of the American Telephone & Telegraph Company, it was almost impossible to sell the stock. Few people were willing to take a chance in the new "trinket", and an editorial in a Washington, D. C. newspaper characterized the project as a sort of "fad" which would soon pass away. Yet at the present time the stock of this gigantic institution is regarded as one of the soundest of investments. Another striking illustration is the United States Steel Corporation. This company was organized in 1901 and the difficulties it had in the early days of its existence are indicated by the fact that its shares sold as low as 8 3/8 in 1904, and attained a high of $261\frac{3}{4}$ in the bull market of 1929.

Management. The size of a company is a direct reflection of the calibre of the men who were instrumental in its development. A history of these successful corporations would reveal in most instances, that men with exceptional ability have brought them to the front. On the other hand, another concern formed at about the same time with practically the same opportunity for growth, either has remained in the second or third place or has been obliged to consolidate with some other unit of the same industry. The management of the

successful corporations, therefore, has been composed of men who not only have had the ability to organize, but have had the vision to keep abreast of economic changes. This is particularly true of the manufacturing industries, where competition is apt to be very keen. The best illustration of this point in recent years has been the growth of the automobile industry, of which the Ford Motor Company and the General Motors Corporation have become the dominant units. Certainly no company in American history has been a more striking example of the efficiency of management than the Ford Motor Company. On the other hand, a good deal depends upon the kind of business. The best management in the world cannot keep a company prosperous which is associated with an obsolete or declining industry. This is well illustrated in the steady decline in the earnings and investments status of many of the street railway systems since the advent of the automobile in large numbers, particularly in the suburban lines connecting small cities and towns. Someone has said that a "Company is no stronger than its management", and this explains the difference in size of various units in the same industry very well.

Frequently there is a noticeable deterioration in the standing of a company after the able men connected with it have passed away. It has been said that there are but three

successful corporations, therefore, are those in which the men in charge had not only the ability to organize, but have had the vision to keep abreast of economic changes. This is particularly true of the manufacturing industries where competition is apt to be very keen. The best illustration of this point in recent years has been the growth of the automobile industry, of which the Ford Motor Company and the General Motors Corporation have become the dominant units. Certainly no company in American history has shown a more striking example of the efficiency of management than the Ford Motor Company. On the other hand, a good deal depends upon the kind of business. The best management in the world cannot keep a company prosperous which is associated with an obsolete or declining industry. This is well illustrated in the steady decline in the earnings and investment values of many of the street railway systems since the advent of the automobile in large numbers, particularly in the interurban lines connecting small cities and towns. Someone has said that a "company is no stronger than its management", and this explains the difference in life of various units in the same industry very well.

Frequently there is a noticeable deterioration in the standing of a company after the able men connected with it have passed away. It has been said that there are

generations from "shirtsleeves to shirtsleeves", meaning that there are but three lifetimes in the rise and fall of a company if it stays in the same family. This not always is true but it has been proved often enough to give the statement considerable weight. Many people have blamed the difficulties of the textile industry after the World War partly to this factor. Most of these companies remained in the same family for years and as long as the founders or their sons retained control the companies prospered, but the later generations were not driven by the same necessity of making good. They had an established business. In most instances the companies were sound financially and had well trained employees, as well as an established market. Then came the World War with its economic upheavals. Prices declined in the deflation of 1920 and 1921, and huge inventory losses had to be charged off. With the war came changed methods of living. Styles underwent radical changes, in that the tendency among women was to wear less clothing. The textile companies expanded rapidly during the war. Additional buildings were erected and plants were geared up to a high pitch. With the falling off in demand, curtailment became necessary and a long period of declining earnings was experienced. Many old established firms were obliged to shut down, and only those concerns that manufactured products used in the automobile

industry were able to show good profits. It may be argued, of course, that these conditions were not primarily a reflection upon the management and this is true in a measure, but at the same time the concerns with the best management were able to overcome these difficulties, while the ones with poor management failed.

Speculation and swindles. In the process of business evolution, many swindles have crept in. Some of the more famous ones in the days gone by have been cited above. In the history of this country, no period has had so many swindles in such huge proportions as in the decade following the World War. The situation was ripe for just such a development. The dominant position of United States during and after the war caused large shipments of gold in payment of the supplies, ammunition, and money borrowed by foreign nations. This brought about great industrial expansion, and the surplus credit which was not required to finance business naturally found its way into securities and speculation. The war keyed the nation up to a high pitch. Coupled with this factor, the sale of Liberty Bonds to millions of people who heretofore had had little or no experience with securities of any kind, caused widespread interest in stocks and bonds, and proved to be fertile ground for the sellers of stocks of all kinds. In the years of 1919 and 1920 millions of dollars were poured into mining and oil stocks

of all descriptions. The large majority of them were worthless. The famous Ponzi scheme exposed in 1920 came when operations of this sort were at their peak. "Bucket-shops" also thrived. These concerns operated in the manner of brokerage firms, making a pretense of buying and selling securities, but in reality stealing most of the money they received. One such firm was reported to have conducted a weekly business totaling several million dollars. Then came the panic of 1920-1921 and with the deflation these firms gradually disappeared, but swindles of a miscellaneous type have continued because people often do not recognize the difference between speculation and swindle. When one speculates, he recognizes that there are risks, but has reason to believe that there is value behind the stocks he buys and a chance for ultimate profit. In the case of swindles, the purchaser merely takes the word of the vendor of securities; has no proof that the stocks are worth anything, and often finds that they are not.

This inability on the part of many investors to distinguish between the quality of stocks, is described by Owen D. Young, chairman of the General Electric Co., in the January 31, 1931 issue of Collier's weekly, in which he says in part: "I thought it would be a fine thing if the individual could build his own estate; it would give him a feeling of independence, a good thing. And since I believe

of all descriptions. The large majority of them [illegible] worthless. The records of [illegible] in 1920 were which operations of this sort were at their peak. [illegible] shops also declined. Those directly interested in the success of subdivision plans, making an industry of buying and selling speculative, and in reality [illegible] much of the money spent themselves. The good lots were [illegible] together to [illegible] mostly business building near [illegible] other cities. Then came the panic of 1920-1921 and with the deflation these titles gradually disappeared. The majority of [illegible] lots have declined because people learned [illegible] the difference between speculation and building. With the speculation, the recognition that there are only a few people to believe that there is value in the property they paid for and ahead for ultimate profit. In the case of subdivisions, the purchaser usually had no idea of the quality of construction has no proof that the street and sewer, lighting, and other fixes that they are not.

This condition on the part of many purchasers is distinguished between the quality of [illegible]. As described by Owen D. Young, chairman of the General Electric Co., in the January 21, 1930 issue of Collier's weekly. In order to keep in [illegible]. If [illegible] it would be a [illegible] that the individual would build his own property, [illegible] of 9 [illegible] a feeling of independence, [illegible] great deal. [illegible]

in the electrical industry and in our own company I thought the soundest method of working toward this objective would be by encouraging our men to buy stock in the company, and aiding them to do so. And so, shortly after the last depression (1920-1921) we launched an employees' stock-purchase program. As I recall it, about 14,000 subscribed for and finished paying for General Electric stock; and as prosperity returned and our business flourished, the market value of that stock virtually doubled and I thought I had done a fine thing. But what happened? It seemed as if every wild promoter in the country began campaigning to get hold of this stock, exchanging it for gold mines, or worthless oil stocks, or a share in any project that offered glittering prospects. Unfortunately, the increase in value of our stock had given employee stockholders an idea that now they knew how easily money was made. They listened to what they wished to hear, and all but about two thousand employee names disappeared from the stockholders' list, their stock passing into other hands. And so I learned that my idea wasn't so fine after all. Because all men are not alike in ability to save, we have the pension system, although the ideal thing would be a condition in which high wage employees laid aside their own reserves. All men, it proved, have not like abilities in holding on to what they have, so we altered our stock-ownership plan."

<u>Speculation and gambling.</u> Another element which is closely associated with speculation is the gambling instinct, if it may be termed as such. There is nothing new in this phenomenon. It originated with the human race, and it is just as much a part of the human "equation" as ever. It is illustrated in card games, race track bets, "pools" of all kinds and descriptions, lotteries, and last but not least, in a certain type of stock market operation. The latter type of gambler buys stocks for the purpose of selling to someone else at a higher price. He is not interested in values, but depends upon a rising or falling market to be successful. The more rapid the movement, the better he likes it, provided he is on the right side. Naturally, such an individual is a parasite. He creates nothing, and seeks to profit from excesses. Professor Tausig, in "Principles of Economics" says: "The evil from the situation arises not only or chiefly from the losses of the unsuccessful speculators. What these lose, others gain, and usually there is not much to choose between winners or losers. The economic loss arises primarily from the waste of much brains and energy on unproductive doings. The waste is more than that of the labor given directly, the labor of the brokers and their under-strappers, and of the speculators themselves. It is increased by the demoralization of many men in the community who take no great direct share in speculation. Like all gambling,

it distracts from the sober, continuous work on which the common welfare rests". One instance was reported of a young dentist, who during the big rise in stocks during the period from 1924 to 1929, forsook his profession because it was "Easier to make money in the stock market". Ultimately he lost all his money and had to go back to work. Another instance was told to the writer of a salesman who had all his money, about $250,000, in a margin account. Like thousands of others, he was convinced that the "New Era" theory was correct and failed to liquidate at high prices. As a result he was sold out in the crash. Being a man about 65 years old, he could not hope to build up his surplus to its former figure unless he was a man of extraordinary ability. These are but two among thousands of similar instances. The stock market gambler, as well as any other kind of gambler, never wins in the long run. If he sticks to it, he is just as sure to lose as he is that the sun will rise. This necessarily must be so. Gambling in any form is not based upon fundamentals, but upon chance, and experience has proved that those who rely upon this principle for livlihood barely break even at best, over a long period.

Speculation and investment. The difference between the speculator and the investor is obvious. The latter buys for value and income. He is not primarily interested in whether his investment is likely to grow more valuable, but he nevertheless

tries to guage his purchases so that he will get them at the lowest possible price. The fact that he is an investor makes this a dominant influence. The shrewdest people in business or private life are investors. They know that 90% of all speculators lose, and in order to be successful they must buy when the speculators are selling and sell when the speculators are buying. The investor studies carefully the company in which he contemplates buying stock. He considers financial condition, earnings, past record, and most of all, future prospects. He not only satisfies himself upon all these points, but he gets the opinion of various experts and bankers upon the subject. Then, when he is satisfied that the stock, or house, or commodity, or whatever it may be that he is purchasing is selling at a fair value, he places his order. In this sense he is not essentially different from the speculator, except that the latter buys primarily for improvement in value, while the investor has income in mind. Frequently it happens, however, that the purchaser does not know whether he wants to invest or speculate. He oftens wants safety of income but in his mind there always is the thought of possible "profit". The person who places his surplus funds in an enterprise first should know clearly just what he wishes to do, for a thorough understanding on this point may mark the difference between success or failure.

Economic changes: Business cycles. Economic developments always have had a profound influence upon investments. The industrial revolution, previously mentioned, was the beginning of the stock and bond era. Wars always have a direct effect upon investments. Business cycles constantly are changing the status of securities, because the attitude of investors and speculators toward seucrities is determined largely by earnings, which contract during periods of depression, and expand during subsequent revivals. According to one statistician, there have been twenty business cycles since 1857 in United States, and the full cycle ranged all the way from twenty-nine months to ninety-nine months.* Prior to 1857 there were panics in 1818, 1825 and 1837.** Unfortunately there has been no systematic record kept of the fluctuations in stock prices prior to the beginning of the present century, but the industrial stock average compiled by the Dow-Jones Company reflects faithfully the business cycles. For example the peak of the industrial expansion in 1907 was reached in May, while the high point in the "average" for that period occurred in October 1906. Again, the low point for the subsequent contraction in business was reached in June, 1908, while close examination of the "average" shows the low point of stock prices occurred in November 1907. The close analogy between business cycles and stock prices is thus shown in practically every instance in which statistics are avail-

* See "The Year in Wall St. Since the Break", by Eugene M. Lokey in New York Times, October 26, 1930.

** Principles of Economics Vol.1.p.400.

able.

This is brought out very well in the December, 1930 monthly review of economic conditions published by the National City Bank of New York, as follows: "We have to remember in times like these that the influences of depression are cumulative and that it is the usual thing for the outlook to appear more and more unpromising in inverse proportion as the depression nears its end. At the first onset of depression only a few lines are apt to be affected. Gradually as production falls off and purchasing power is curtailed, other lines are involved. These lines affect other lines, and so the disturbance spreads. As production lessens, profits are diminished, causing a decline in security values which not only inflicts financial loss upon a great many people, but unsettles confidence, which in turn hurts business some more and contributes to still greater security declines. Moreover, with a declining consumptive demand, commodity prices come under pressure, thus introducing further and still more serious complications. Since prices never fall equally, business is checked because of the inability of the different groups of producers and consumers to trade freely with each other. And as the price decline continues, the circle of disturbance grows constantly wider, involving in varying degree wages, rents, land values, and finally the credit structure

itself which rests in the last analysis upon the basis of values.

"In short, the processes of deflation operate in a vicious circle, each unfavorable development bringing in its train a series of other unfavorable developments, each of which in its turn constitutes a potential source of further difficulty. But obviously this sort of thing has to come to an end sometime, and by the very nature of the circumstances the turn comes at the time when to most people everything looks the blackest. Just as the basis of every depression is laid in the preceding period of prosperty, so the basis of every prosperity is laid in the preceding period of depression. It is at such times that we correct the mistakes and remedy the abuses of inflation. Costs of doing business are reduced. Surplus stocks are gradually absorbed and shortages begin to appear. Old debts are paid and funds for new enterprise commence to accumulate. Gradually the weak spots are eliminated, stabilization develops, and confidence is restored.

"At precisely what point this hoped for stabilization will take place can never be foretold with certainty. In the beginning, the corrective factors work beneath the surface, and are often obscured by the more spectacular happenings that usually mark the culminating phase of either a bull or a bear market.

"Hence, in forming judgment of the future it is necessary

[illegible]

of values.

In short, the essence of [illegible] circle, [illegible] source of [illegible]

[illegible] and by the very nature of [illegible]

Just as the death of every [illegible] in the pre-ceding period of prosperity, so the seeds of [illegible] is laid in the preceding period of depression. [illegible] tration. [illegible] are gradually [illegible] are paid and funds [illegible] Gradually the [illegible] and conditions of [illegible]

It [illegible] place [illegible] tion, [illegible] cation obtained [illegible]

Hence, in [illegible]

to make allowance for this human tendency to project the present situation forward in a straight line. Of course, the fact that a feeling of pessimism prevails in many quarters is not in itself a sure indication that the bottom has been reached, but it may be worth remembering that such is likely to be one of the characteristics of the bottom when it is reached. At this stage of every depression we have to recognize that the visibility is bound to be low, and draw inspiration from a common sense realization of the underlying resources and strong recuperative powers of the country, as demonstrated over and over again in the past, rather than from any signs of improvement."

Unusual developments. Sudden and unheralded events always are reflected in the security markets. The start of the World War brought such an avalanche of selling into the stock market that the authorities closed the exchange on July 31, 1914 and did not reopen for trading until December 12, 1914 and then only in a limited number of stocks under restrictions. On September 18, 1873 the stock exchange closed at noon because of the failure of Jay Cooke & Co. promoters of the Northern Pacific Railroad. The exchange reopened on September 30, 1873, but between Sept. 18 and the close of that year there were 57 stock exchange failures,

besides the closing of the Union Trust Co., the Bank of the Commonwealth and other financial institutions.* Important gold discoveries have had a marked influence upon business and financial conditions. The gold discoveries in California and Alaska were examples of such events. The effect on credit is seen in the Annual report of the Director of the Mint for 1918. Production of gold jumped from $36,393,000 in the period from 1841 to 1850, to $132,513,000 in the period from 1851 to 1855. The high point of gold production was reached in 1915 when gold valued at $468,724,918 was produced. The effect of such developments in recent years has been more noticeable because of the large increase in number of securities. New inventions, political disturbances, or any incidents of a revolutionary character are sure to influence business and the security markets.

<u>New forms of enterprise.</u> The changes that are constantly taking place in business methods also are reflected in the value of securities. The era since the beginning of the 20th century has been called "The Machine Age", reflecting as it does the increasing use of machinery in production. Its effect has been far-reaching, lowering cost of production, increasing output, and making shorter working hours. This has been particularly noticeable in the production of automobiles. The Ford Motor Motor Company, through efficiency of management, and extensive

* New York Stock Exchange Year Book, 1929-1930, Page 14.

Besides the closing of the [illegible] the [illegible] of the

Government's and other financial [illegible]

gold [illegible]

of financial conditions. The gold [illegible]

and [illegible] of such events. [illegible]

[illegible] in the annual report of the [illegible]

1915. [illegible] of gold [illegible]

[illegible] in 1914, [illegible]

1916. The high [illegible]

[illegible]

such developments [illegible]

[illegible] of the large [illegible]

[illegible]

[illegible]

markets.

Labor [illegible] the changes that [illegible]

taking place in [illegible]

of [illegible]

has been [illegible]

[illegible]

[illegible]

and [illegible]

[illegible] in the [illegible]

labor [illegible]

1. See New York Stock Exchange [illegible], page 14.

use of machinery, has been able to place on the market an automobile that is within the means of almost every individual. Other companies have had to fall in line, with the result that mass production is being carried into almost every field of business where possible.

Investment trusts. *The investment trust idea is not a new one in England, but in United States, it did not become prominent until after the panic of 1920. The movement was gradual at first, but with the rising stock market in the period from 1924 to 1929, the tremendous increase in demand for securities of all description caused more and more of these companies to be formed. Their effect was to bring into the stock market a large class of individuals who were not financially able to buy a diversified list of stocks, but who had the desire, nevertheless. It was argued that here was a method by which everyone could participate in a big rise in securities, and at the same time have the advantage of expert management. It was argued that the support of investment trusts in the market would help stabilize prices and prevent any further severe deflations. The arguments of the conservatives that credit was becoming strained were called old fashioned. That these people were wrong now is a matter of history, and was reflected in the fact that during the subsequent decline, the price of many trust stocks sold far below their liquidating value. Nevertheless, the investment

* See also Harvard Business Review, October 1930, page 78 and 88.

use of machinery, has gone still further in the American automobile [illegible] the extent of almost every individual. Other countries have had to fall in line, with the result that mass production is being carried into almost every field of business where possible.

Investment Trusts. The investment trust idea is not a new one in England, but in United States it did not become prominent until after the panic of 1920. The movement was gradual at first, but with the bullish stock market in the period from 1926 to 1929, the tremendous increase in demand for securities of all descriptions caused more and more of these companies to be formed. Their effect was to bring into the stock market a large class of individuals who were not financially able to buy a diversified list of stocks, but who had the desire, nevertheless. It was argued that here was a method by which persons could participate in [illegible], and at the same time have the advantage of expert management. It was argued that the [illegible] of investment trusts in the market would help stabilize prices and prevent any further severe deflations. The arguments of the conservatives that [illegible] were called old fashioned. That there were [illegible] is a matter of history, and was reflected in the fact that during the subsequent decline, the price of many trust stocks sold far below their liquidating value. Nevertheless, the investment

* See also Harvard Business Review, [illegible] 19[illegible], [illegible]

trust has proved that it has a place in the security market. A sound, well managed trust, under proper restriction, is an ideal form of investment for the person who is not in a position to keep in touch with economic changes and developments that might effect a large number of companies. The safety in such an institution is in the ability of its management, and its success or failure largely is dependent upon this factor.

New industries constantly are attracting speculative capital. The most recent at this writing is the airplane industry. These companies are going through all the trying experiences that all new industries have in their early years. The time has not yet arrived when the public demand for airplanes has reached the proportions that will bring about an excess of new companies and inflation, but a hint of what may eventually happen in this industry was noticeable after the successful flight of Colonel Lindburgh. Most airplane stocks rose several hundred percent in a few months, but since that time it has become quite apparent that the public has not yet reached the stage of enthusiasm for airplanes which will bring about an era of large scale production. The radio industry previously has been mentioned. That other new industries will develop as long as the human race endures is obvious, and that these will be accorded the same kind of a reception by investors as long as the present economic system

exists, seems certain.

<u>Effect of credit expansion on speculation.</u> The effect of the credit supply upon securities is direct insofar as it applies to those who do not pay for their securities in full. When credit is plentiful, money rates are cheap, and it is a comparatively easy matter to buy stocks on margin. The broker requires the customer to pay a given percentage of the market value of the securities bought, usually 25 to 50% or more, depending upon business conditions and the kind of security. The broker is obliged to hold the stocks bought on margin, so he must either put up the additional money or borrow from his bank. The total borrowings of brokers and bankers on securities constitute the so-called "brokers' loans" which are reported weekly by the Federal Reserve Board. Naturally, when the credit supply is plentiful borrowing is advantageous for the person who trades on margin, but when increased activity in business reduces the amount of credit available, money rates go up, or "tighten" to use the language of the financial world. Then it is disadvantageous for the trader to buy stocks on margin, for it usually happens that when stock prices are high, yields are low, and the interest on the loan is greater than the yield on the stocks purchased.* The outright purchaser of stocks is effected indirectly by credit conditions. When credit is easy, and money rates are cheap, there ultimately materializes an expansion in

* See The Work of the Stock Exchange" by Meeker, Chapter VII, page 175.

business. This business expansion results in higher earnings for most industrial and utility companies. Inasmuch as the earnings of a company are used as one gauge for determining the value of a stock, prices of the stocks rise or fall with the earnings of the company. In periods of high earnings, therefore, prices are likely to be higher than in periods of adverse earnings. Thus the person who is accustomed to pay for his securities in full must pay higher prices during times when earnings are high and credit supply is reduced than when earnings are low and credit supply ample. It may be argued that the shrewd investor does not buy stocks when prices are high. This argument may be true as applied to the investor, but in periods when earning power of companies is high, there is a greater amount of surplus money available for investment, and experience has proved that more stocks are bought at such times than in the reverse circumstances.

Naturally the gold supply has a profound influence upon credit. The country with a large gold supply has an abundance of credit. Should this gold be given unrestricted use in business, it would cause inflation of the most drastic sort. This was illustrated in the period of expansion from 1918 to 1920, and from 1924 to 1929. Even the influence of the Federal Reserve Board could not prevent inflation during those periods, when about half of the gold supply of the world was

within the borders of America. It is estimated that one dollar of gold is equivalent to about $10 worth of credit. When business expansion extends this ratio, the situation becomes dangerous, and ultimately must result in deflation. To date there have been no means devised to prevent such developments. The Federal Reserve Board is able to prevent too great extremes, through the raising and lowering of the rediscount rate,but this agency cannot prevent inflation in some form and subsequent deflation.

A good deal of comment has been made in recent years in regard to the diminishing production of gold. *There isn't enough monetary gold in the world, it is claimed, and the increment of new gold is shrinking yearly faster than it ought to, and the existing gold stock is very badly distributed among nations, some few having vastly more than they can use, while others are handicapped for lack of adequate gold holdings. The gold production of the world, which had climbed from $100,000,000 yearly in the '80's and $200,000,000 in the '90's to a high of $467,000,000 in 1912, has slowly receded to just under $400,000,000 at this writing. Output of United States has shrunk from a high of $101,000,000 in 1915 to about $45,000,000 a year. In the meantime, the amount of world business based upon this gold has been growing steadily, with some countries forsaking the silver for the gold standard.

* Boston News Bureau, Nov. 22, 1930.

within the borders of any nation. It is estimated that the industrial gold is equivalent to [illegible] [illegible] to [illegible] [illegible] method [illegible] [illegible] become dangerous, [illegible] [illegible] to date there have been no [illegible] [illegible] gold developments. The [illegible] [illegible] is gold [illegible] the great war. [illegible] [illegible] [illegible] [illegible] gold from the [illegible] legislation.

A good deal of concern has been felt in recent years in regard to the diminishing production of gold. Although [illegible] [illegible] gold [illegible] [illegible] the [illegible] [illegible] [illegible], and the existing gold stock is [illegible] [illegible] nations, some [illegible] [illegible] [illegible] [illegible], while others are [illegible] for lack of adequate gold [illegible]. The gold production of the world, which had climbed from $100,000,000 yearly in the 1890's and $[illegible] in the [illegible] to a high of $467,000,000 in 1915, has [illegible] [illegible] under $400,000,000 [illegible] [illegible] [illegible] has [illegible] [illegible] of $[illegible] in [illegible] [illegible] $[illegible],000 a year. [illegible] [illegible], the [illegible] [illegible] business based upon this gold has [illegible] [illegible], with more [illegible] [illegible] [illegible] for the gold [illegible].

* [illegible] [illegible], Nov. 1[illegible], 19[illegible].

Hence, on the quantitive theory, the conclusion is that gold base is becoming uncomfortably narrow and that prices are being and will be unduly depressed. Thus as recently as September 23, 1930 it was declared by the conference of League of Nations delegates studying this question, including some American representatives, that "the supply of new gold available for monetary purposes will be inadequate by 1934 unless measures to alleviate the situation are taken in time." On the other hand some economists declare the gold scarcity argument much overdrawn. They are inclined rather to blame the costs and losses of the World War. It is obvious, however, at this writing, that there is a serious "maldistribution" of the existing gold supply. Two nations, America and France, have over 55% of the total gold supply held by 44 nations. It is this relative world scarcity and serious dislocation which have led some English authorities, notably Sir Josiah Stamp and Lord Dabernon, to fear something like bankruptcy for some parts of Europe unless the situation is alleviated.*

So long as gold remains the basis of credit and the foundation of the money system, prices are measured in terms of gold. Hence, when the supply of gold increases more rapidly than the supply of commodities, other things being equal, prices advance; and when the supply of gold declines more rapidly than the supply of commodities, prices decline. The developments in this situation also

* Boston News Bureau, Nov. 22, 1930.

effect security prices in the same ratio.

<u>Unusual aspects of stock speculation.</u> Speculation in stocks is unusual in that it embraces a much larger field than other forms of buying for profit. Speculation in commodities is confined to one product. At least an individual who speculates in wheat may buy other grain futures, but he seldom buys a large number of commodities at a given time. The stock speculator, however, is not all niggardly in his choice. He buys many stocks of widely spearate interests, if he has the money. Quite frequently, he is more interested in the price of the stock and whether it is likely to advance in value, than he is of the nature of the company's business. In fact, it is well known in investment analysis circles that an investor sometimes will buy a stock and then make inquiries as to the kind of business he has bought into. No one would question the principle that diversification is one of the prime requisites to a sound investment policy, but care should be taken that this policy is not carried too far. An investment of a few thousand dollars spread over a large number of stocks would be just as poor judgement as to put all of one's surplus earnings into one speculative security.

Then too, investors often think of stocks as something intangible. They do not connect the paper they have as something

representing value. Too often, of course, the stock certificate does not represent value, but the holder of a share of stock issued by a leading industrial, utility, or railroad company, should realize that the certificate represents a partial ownership of the entire company. If more consideration was given to this truth, investors would be more likely to ascertain whether or not a stock was worth the price before they bought it. Those who buy land, or commodities, or the essentials of daily life, seldom buy without at least visualizing the article they are purchasing. There is no essential difference, fundamentally, in buying securities.

<u>The stock broker and his influence upon securities.</u> The broker is expected to render a service in the constant exchange of securities. Nevertheless he has considerable influence upon the fluctuations in the price of securities under certain conditions. It previously has been stated that when a speculator or stock trader buys stocks on margin, the broker ~~either~~ supplies the difference between the amount put up by the customer and the total sum necessary to purchase the stock. The customer must keep his margin "good" at all times. Consequently, when stocks go down, the broker "calls" for more margin to protect his own capital. If the customer does not pay the sum demanded, the broker has the authority

representing values. The other, of course, the stock certificate does not represent value, and the holder of a share of stock issued by a leading industrial, utilities, or railroad company, should realize that the certificate represents a partial ownership of the entire company. If more consideration was given to this truth, investors would be more likely to ascertain whether or not a stock was worth the price before they bought it. Those who buy land, or commodities, or the necessities of daily life, seldom buy without at least visualizing the article they are purchasing. There is no essential difference, fundamentally, in buying securities.

The stock broker and his influence upon securities. The broker is expected to render a service in the constant exchange of securities. Nevertheless he has considerable influence upon the fluctuations in the price of securities under certain conditions. It previously has been stated that when a speculator or stock trader buys stocks on margin, the broker either supplies the difference between the amount put up by the customer and the total sum necessary to purchase the stock. The customer must keep his account "good" at all times. Consequently, when stocks go down, the broker calls for more margin to protect his own capital. If the customer does not pay the sum immediately the broker has the authority

to sell the stock to protect himself. In periods of rapidly declining prices, therefore, the decline is accentuated by selling of unprotected margin accounts. Within recent years there also has materialized a good many devices designed to protect traders from loss. One of the most common of these is the "stop-loss" order. By this plan, the customer places an order to sell his holdings at several points under the prevailing price in order to protect his profit, or limit his loss, as the case may be. After a sustained rise in the market there is likely to be a large number of these "stop-loss" orders in the hands of brokers waiting to be transacted. In a sudden decline, these are "touched off" to use the phraseology of the financial district, and the increase in sales through this mechanical device also causes sharper declines in various stocks than ordinarily might be the case. In other ways, the broker influences the price of stocks through underwriting securities, whereby he often adds a considerable sum to the amount the financing company receives to cover cost of underwriting, banking fee, etc. Naturally, the investor pays for this service, and if the stock is generously priced, he often finds that he must wait a considerable time before the earning power of the company is sufficient to warrant the price paid for the stock. Brokers also frequently render a service to customers, in which more or less expert advice is given in the purchase and sale of securities. Too frequently, however, the

to sell the stock to protect himself. In periods of rapidly declining prices, therefore, the broker is responsible, by selling of an important margin accounts. Within recent years there also has entered into a good many devices designed to protect traders from loss. One of the most common of these is the "stop-loss" order. By this plan, the customer places an order to sell his holdings at several points under the prevailing price in order to protect his profit, or limit his loss, as the case may be. After a sustained rise in the market there is likely to be a large number of these "stop-loss" orders in the hands of brokers waiting to be executed. In a rapid decline, these are "touched off" as the the shrinkage of the financial district, and the increase in sales through this mechanical action also causes sharper declines in market prices than ordinarily might be the case. In other ways, the broker influences the price of stocks through underwriting securities, whereby he often adds a considerable sum to the amount the financing company receive to cover cost of underwriting, sending list, etc. Naturally, the investor pays for this service, and if the stock is consistently priced, he often finds that he must wait a considerable time before the earning power of the company is sufficient to warrant the price paid for the stock. Brokers also frequently render a service to customers, in which more or less expert advice is given on the purchase and sale of securities. Too frequently, however, the

broker and his customers' men are more concerned in the sale of some issue the firm is underwriting than in the best interests of the investor. The high grade brokerage firm, however, renders an invaluable service to investors and speculators.

The law of supply and demand. This fundamental principle of trade also is a basic element in the market for securities. It is responsible for stocks selling at prices greatly in excess of their true value near the end of a "bull" market, and for a corresponding underrating of values in a "bear" market. The demand is largest in the final stages of a "bull market" and least in the last stages of a "bear market". This was illustrated in in the period prior to the crash in 1929. Stocks were bid up regardless of earnings or values. The main reason for buying a stock was because the purchaser expected it to advance in price. Whereas in prior years a conservative value for a stock was calculated at about 10 times earnings, it was argued that stocks were not over-priced at 20 or even 30 times earnings.* Thus the frenzy for making a "profit" in stocks resulted in bids being placed at any price. Now turn to the other side of the picture. In the decline which started soon after September 3, 1929, and culminated November 13, 1929, there were times which many shares were offered for sale but the bids were away below market value. As a result prices melted away rapidly. In a few instances, it was reported that there were no bids for certain stocks when the

* See Appendix, page 98.

broker and the customer; and [illegible] more [illegible] with the sale of more issues than with a [illegible] interest in [illegible] of the investors. The high grade brokerage firms, however, continued substantially serving its investors and speculators.

The Use of Marginal Account. This development [illegible] of speculation is a vital element in the market for securities. It is responsible for [illegible] stocks [illegible] in excess of their true value near the end of a "bull" market, and for a corresponding underrating of values in a "bear" market. The demand is largest in the final stages of a "bull" market and least in the last stages of a "bear market". This was illustrated [illegible] in the period prior to the crash in 1929. Stocks were bid up regardless of earnings or return. The main [illegible] for buying a stock was because the purchaser expected it to advance in value. [illegible] a [illegible] value for a stock was calculated at about 10 times earnings, it was [illegible] that stocks were not over-priced at 20 or even 30 times earnings.[1] Thus the frenzy for making a "killing" in stocks resulted in their being [illegible] at any price. [illegible]

In the decline which [illegible] 1929, and culminated November 13, 1929, there were times at which stocks were offered for sale but [illegible] at [illegible] prices [illegible]. [illegible] was reported that [illegible]

1. See Appendix, page [illegible].

selling was at its height, particularly some of the investment trust issues which were formed a short while prior to the break in the market. During the long period of declining prices which began in April 1930, and continued with a few short periods of interruption up to the end of the year, the supply of stocks nearly always was in excess of the demand. The speculative element being largely eliminated, the bids for stocks usually were at some point below the prevailing market. The investors, therefore, were willing to take stocks at their own price. In other words, it was a "buyers" market. Under these conditions, the tendency was for prices to fall. Those who had stocks for sale frequently were willing to take any price, while those who wanted to buy could name their own price. This always is true in declining market, whether stocks or commodities are being dealt in.*

Selling to establish losses for income tax purposes also was a factor in the decline, and this was responsible for a larger number of shares being offered in the latter part of 1930 than ordinarily might be the case. Those who were obliged to pay an income tax could deduct losses from sale of securities, and the abnormal quantity of such shares offered, in the absence of an equal or greater number of bids, gave impetus to the severe pressure upon prices.

* See also Principles of Economics - Tausig - Chapters 18, page, 236-251; chapter 22, page 290-309; chapter 31, page 427-445.

solidarity of the [illegible]. Consequently, once [illegible] weakened [illegible] a shock [illegible] in the break in the market. During the long period of declining prices from March to April 1921, and continued with but short periods of interruption up to the end of the year, the buying of stocks nearly always was in excess of the demand. The spreads were allowed to be materially diminished, the bids for stocks usually being at some point below the prevailing market. The investors, therefore, were willing to take stocks at their own values. In other words, it was a "buyers" market. [illegible] conditions, the tendency was for prices to fall. Since the [illegible] for sale frequently were willing to take any price, while those who wanted to buy would name their own price. This always results in a falling market, whether stocks or commod-ities are under consideration.*

[illegible] for the purchase also was a factor in the decline, and this was responsible for a larger number of shares being offered in the latter part of 1920 than ordinarily would be the case. [illegible] obliged to pay [illegible] loans and could [illegible] securities, and the abnormal quantity of such [illegible] in the absence of an equal or greater number of bids, was [illegible] to the severe pressure upon prices.

* [illegible]
[illegible]
[illegible]

## PHSYCHOLOGY AND ITS RELATION TO SECURITY MARKETS.

What is Psychology? Psychology is described as the science of human behavior.* The Century dictionary describes it as the "Science of the phenomena of mind; mental science", and enlarges upon this definition as follows: "It is said to have orginated with Pythagoras. Aristotle greatly improved it, and stated its most important principle, that of the association of ideas. It has, however, only recently taken the position of a universally acknowledged science; and its methods are still in dispute. Some psychologists hold that we know the mind by direct intuition in consciousness; others, distinguishing between consciousness and self-consciousness, hold that the former involves no recognition of the mind, while the latter is not an origianl power, but only acquired knowledge. But, though such inward vision be denied, most psychologists still consider the observation of what passes within us as the main foundation for psychology. Others regard introspection as too deceptive to be of much use, and some deny its possibility. ----The prevalent school of modern psychologists attributes great importance to systematic experimentation by one person upon another, especially to quantitative determinations, as of the time occupied in different mental processes, the force required to produce sensations of given intensity, and the like; yet some of the older generation predict that the utility of this

* Encyclopaedia Britannica, vol. 22 pages 547 to 604.

method will be found to have narrow limits."

The Encyclopaedia Britannica describes psychology as the "science of mind" which can only be more strictly defined by an analysis of what the 'mind' means.

* Professor James says the definition of psychology may be best given in the words of Professor Ladd, as the description and explanation of sense of sonsciousness as such.

Although the science of psychology has been recognized for a long time, it is only with the past 75 or 100 years that it has been organized as such. At the present time there are two schools of psychology; introspective and behavioristic. The difference between the two is very marked. The first is concerned with methods which rely upon verbal reports from individuals as to what is going on in their own mind. The second studies activity, action, behavior. There are different phases of the science, which may be divided into the following groups: educational, religious, social, legal, medical, business, employment, and psychology of working conditions. Those which we are primarily interested in this thesis include business, and possible the lasttwo. Business psychology is the study of the behavior or reaction of individuals under various business conditions. Under this heading we find that instincts, emotions, individual differences, habits, mental alertness, environment and training have important functions.

The individual. Notwithstanding the often repeated proverb

* Psychology, William James, Page 1.

that "all men are created free and equal", psychologists tell us that while men may be created free they are by no means equal, that the inequalities are due to a number of factors, such as social, environment, training, heredity, intelligence, etc.* It is well known among financial men that professional people often are very poor investors and speculators. A good doctor, teacher, lawyer, or theologan, may rank very high in his chosen profession, but the fact that he has been intensively trained along special lines, often makes him peculiarly susceptible to the vagaries of the stock exchange and the not too honest people sometimes connected with the distribution of securities. This does not always apply to professional people, however. The founder of a well known financial publishing concern nearly always lost money in the stock market. When he went away on a trip, his secretary , who had charge of his investments, would sell a large part of his holdings, and, when taken to task for so doing, would say, "Well, I thought you would be able to buy them cheaper", and this invariably would prove to be true.

The matter of training does not necessarily make one a successful investor although it must be admitted that the trained man has a much better chance, particularly if his training has been along financial lines. But the early financiers, whose names have been handed down, were often men who would be termed illiterate at the present time. In fact,

* See Tausig, Chapter 54, page 246. Principles of Economics.

Mill's "All men are created free and equal". Psychologists tell us that while men may be created free they are by no means equal; that the personalities are due to a number of factors, such as social, environmental, physical, hereditary, etc. It is well known among (Trumbull) men that professional people often are very poor investors and speculators. A good doctor, teacher, lawyer or theologian, very frequently high in his chosen profession, and the fact that he has been scientifically trained along certain lines, often makes him particularly confident of his success in the stock market and he may become greatly overconfident compared with the distribution of securities. This does not always apply to professional people, however. The remark of a well known financial authority concerning [illegible] always stands in the stock market. When he went away on a trip, his secretary, who had charge of his investments, would sell a large part of his holdings, and, upon his return and for some doing, would say, "Well, I thought you would be able to buy them cheaper", and this invariably would prove to be true.

The number of trained men who are successfully [illegible] commercial investor although it must be admitted that the trained man has a great [illegible], particularly if his training has been along financial lines. For the novice [illegible] dealers, whose homes have been bought here, were attracted who would be thrown [illegible] of the present situation. In fact

* See Psychology, Chapter [illegible], page [illegible]. Principles of [illegible].

Henry Clews, in his book "twenty-eight Years in Wall Street", stated that he doubted if a college training was desirable for a financial man. Another of the early financiers, Commodore Vanderbilt, could see nothing wrong with the expression "Never tell nobody what yer going to do, till you do it". Daniel Drew, whose fortune as a stock trader at one time was estimated at $13,000,000; who started life as a cattle drover, and to whose ingenuity was attributed the term "watered stock", always referred to shares of stock as "them sheers".* In fact, the most successful financiers have been those whose mental alertness have enabled them to think just a little sooner than the majority of other people. But at the same time it is doubtful if the same men who were successful in the early days of American finance, would be able to successfully cope with the present highly organized business machinery. The successful financier of today is perhaps one of the most highly trained individuals in the world.

General intelligence.** Differences in intelligence are very marked in the attitude of millions of people toward investments. Intelligence is a factor which has received the greatest amount of attention among psychologists and is the oldest form from standpoint of psychological research. As a result a great many tests have been conducted.

What do we mean by intelligence? There is no agreement among psychologists as to what it is. We think we know what we mean by a man's intelligence but when we want to define it

* Twenty eight years in Wall St. by Henry Clews. Page 117-118
** Prof. Chamberlin's Lectures, March 21, 1929.

there are difficulties because we are not able to evaluate the factors which go to make it up. It consists of a group of elements. Some think that attention is a most important factor. Others think judgement is important; or the ability to unite into a single unit all the experience of daily activity. Still others think learning ability is the measurement of intelligence. Professor Chamberlin says: "my feeling is that intelligence must be measured in terms of the ability an individual has to adapt himself to the environment in which he is born. You will notice that this is a social definition of intelligence. Furthermore it is relative. The intelligence of the negro in Africa is relative to race and geographical environment." Intelligence is not made up of one single factor, therefore, but of a combination of several.

Assuming that judgement and learning ability are the essential qualities in measuring intelligence as applied to securities, what do we find? The writer's experience is that the average person uses very little judgement in the choice of securities. This is shown in the fact that most people measure their investments by the size of their pocket-book rather than by the quality of the investment. Naturally the amount of money one has to invest is of primary importance, but the majority of investors prefer to own a large number of shares of a cheap stock, than a few shares of good stock. They apparently feel that there is a greater chance for improvement among the cheap stocks than

there is in high priced stocks. The fallacy of this type of reasoning is shown by the fact that the price of a stock is determined by the value behind it and the earning power of a company, rather than by market quotations.

The intelligence of the large majority of speculators also is well illustrated by the constant endeavor to reduce market movements to a formula. The most common of these are the charts. It is assumed that the movements in an individual stock or group of stocks are determined by various resistance points; that is, when the market or an individual stock advances, the subsequent action will be determined by whether it is able to maintain its advance. Should the stock decline from the high and then show the ability to break through the former high, it is assumed that it is in a strong position and will have a further rise. Conversely, a decline is measured in the same manner. When a stock declines to a low point, and then rallies, its subsequent movements are determined by its ability to keep from breaking through the former low point. Should it do so, it is assumed, by the chart theorists, that it is not able to maintain its price because of technical or fundamental factors, and this invites further selling. The fact that a great number of people believe in this theory makes it "workable" up to a certain point, because the concerted action of a large number of people will make a theory prove truthful to a certain degree, whether it is sound or not.

The fallacy of this form of reasoning is proved by the fact that the chartists seldom make money in the stock market over a very extended period.

The differences in intelligence also are noted in the various groups of investors. In the second paragraph of this section on intelligence, we assumed that judgement and learning ability are essential qualities for sound investment reasoning. This would indicate that the investors are the most intelligent. They buy when other people are selling. They take the stocks and bonds that are offered after a big decline. It must not be assumed that all people who sell at the bottom of a movement are the least intelligent, however. Some sell because they are obliged to. But it is safe to say that large numbers of people sell when they are not obliged to, because of the influence of mob psychology and fear, which will be discussed later. The second group are the speculative investors. They have safety in mind, but they also desire to make a profit. When they notice that prices are improving they commence buying. By far the greater group, however, consists of the speculators. Their only interest is in a desire to make a profit.* Experience has shown that most of these do not become interested in stocks until prices are up 50% to 75% or more from the lows, and in the final stages of a movement, the buying is of the least intelligent type, consisting of people with relatively small earning capacity, and those who are likely to be carried away with the

* See Appendix, page 105, August 13,1929,page 115.

excitement of the occasion.

The element of learning ability is hard to gauge in the stock market. It is reasonable to believe that a large number of people learn by their mistakes, but often their first experice is so costly that they do not live long enough to profit by their prior experiences. But, on the other hand, there are innumerable instances whereby investors persist in buying the same type of securities as long as their money lasts. The most common revelations of this sort are in settlement of estates. Frequently instances are reported whereby investors have put large sums of money into stocks of the "wildcat" variety; that is, highly speculative issues, and never have brought anything else. This type is discernible in the equality of inquiries received in the financial department of a large metropolitan daily newspaper. Some investors persist in asking about the possibilities in low-priced, highly speculative stocks. In fact, such people seldom, if ever, inquire about anything else.

But there are evidences that some investors learn by their experiences in the stock market, and also have the ability to profit by them. In the period of rapidly declining prices during October 1929, the writer was in the office of the Boston Evening Transcript on the evening of the 29th of that month, which was the most active day in the history of the New York Stock Exchange, up to the present writing, when 16,410,000 shares changed hands. On that day the "tape" was so late in

printing the final transactions that the closing stock editions of the evening newspapers were not published until after eight o'clock that night. The offices of the newspapers were crowded with men who were waiting for the "last edition", to see what their stocks were selling for. The writer heard one man ask his neighbor if he had lost anything in the crash. The man said "I was caught in the 1920 crash and learned my lesson then". He had sold out some time before. This is but one instance, but it is sufficient to prove that some men do learn by their experiences and those who are able, profit by them. But the learning is slow process. Business cycles move slowly, and by the time another upward cycle is at its height, there is a new group, who have to learn their lesson, as their fathers did before them. Then, too, the various cycles differ in their duration and severity, which is apt to be confusing to many. In fact, it is the human element in business and the security markets that makes them so hard to judge.

At what rate does learning take place, is a question which may logically be asked, and is the rate of learning steady? Several tests have been conducted by psychologists to determine this factor. One of the best known was conducted by Bryant & Harter.* They used telegraphic language with actual telegraph operators, and arrived at a sending curve and a receiving curve. The results shows that the sending curve was lower than the receiving curve, and the receiving rate finally exceeded the

* Prof. Chamberlin's Lectures Feb. 14, 1929.

printing the "Final Extras," that the closing stock edition of the evening newspapers were not published until [illegible] o'clock that night. The offices of the newspapers were crowded with men who were waiting for the "last edition", to see what their stocks were selling for. The writer knew one man who told his neighbor if he had lost anything in the market. He was told "I was caught in the 1920 break and learned my lesson then". He had sold out some time before. This is only one instance, but it is sufficient to prove that some men do learn by their experiences and those who are able, profit by them. Yet the learning is slow process. Business cycles come slowly, and by the time another general cycle is at its height, there is a new group, who have to learn their lesson, as their fathers did before them. Then, too, the various cycles differ in their duration and severity, which is apt to be confusing to many. In fact, it is the great element of [illegible] and the [illegible] methods that makes them so hard to judge.

At what rate does learning take place, is a question which may logically be asked, and is the rate of learning steady? Several tests have been conducted by psychologists to determine this factor. One of the best known was conducted by Bryan & Harter.* They used telegraphic language with several telegraph operators, and arrived at a sending curve and a receiving curve. The results showed that the sending curve was lower than the receiving curve, and the receiving rate finally exceeded the

* Prof. Chamberlin's Lectures [illegible]

sending rate. During the test however, there was a period which formed a sort of level plane in which both curves were approximately the same, but in the final stages of the test, the receiving curve showed sharp increase over the other. The receiving curve, therefore, can be analyzed as more nearly characteristic of learning ability, and more in line with human activity as measured in stock market movement charts. In all such charts, as in the receiving curve outlined above, there approaches a period in which the line does not move either upward or downward to a very marked degree. This is known in psychological terms as a plateau. This plateau is due to several factors. *Bryant and Harter conclude that the plateau occurs when the lower order habits have not become sufficiently automatized to let the higher order habits take place. The lower order habits develop at the same time but not at quite the same rate, so that the plateau is probably because of the lower order of habits not becoming automatized. The plateau occurs when the first interest begins to wane. It may be due to fatigue, or lack of interest. There is a gradual flattening of the curve when the psychological limit is approached, but though we may approach the physical limit we never get to the point where we cannot do better.

This leads to the question; can the plateau be eliminated? Psychologists conclude that it can be eliminated if two conditions are fulfilled: first, if interest is sustained and second; if

*Prof. Chamberlin's Lectures, Feb. 7, 1929

the learning is under control of the learner.

The normal learning curve is very noticeable in stock market activities, although in this instance it may more properly be termed the curve of interest or attention. Just as soon as a sudden development becomes known stock prices take a sharp upward move until it can be determined how favorable the development may be. Then a sidewise movement takes place, corresponding to the plateau. If the development indicates that the price of the stock has not fully discounted the event, another rise takes place, which may or may not be more gradual than the first movement. In a like manner the psychological attitude toward securities taken as a whole may be explained. Following a drastic decline in the market due to a business depression or some other factor, there is a period of several months in which prices drag along at a low level. Then the various barometers of business indicate a turn is imminent. At this point there is apt to be a sharp upward movement, followed by a plateau. Then as the situation becomes more rounded out, the curve again shows a rising tendency. This is more noticeable in the bond market than in the stock quotations, for the reason that bond prices are steadier and do not show such wide fluctuations. In general, however, the curve is similar in both instances.

Habit and memory.* Our study of psychology tells us that habit and memory are among the higher mental processes, when compared with other processes such as sensation, instinct, etc.,

* Prof. Chamberlin's Lectures, Feb. 7, 1929.

and so to a certain extent they are traits more characteristic of men than other forms of animal life. The importance of habit has been proved by Professor James. He says that the more we can reduce our daily activities to a daily plan, the more efficient we become. We may ask, therefore, what is habit? Habits are described as something acquired during the life of the indifidual. They never are born in the individual. No matter how firmly we develop a habit, we cannot pass it on, but it is acquired from learning. In psychological terms, habits are new pathways in our nervous system for an impulse to pass over. They perform various functions. They simplify our movements; make our actions more accurate; decrease conscious attention, and decrease fatigue. We further learn from our study that habits are formed early, other things being equal, and that it is important to form good habits only. We discover that in forming a habit there are three things to keep in mind: First, make the first action as strong as possible; second, repeat it as often as possible; and third, allow nothing to interfere until the habit is firmly fixed. Furthermore, habits can be broken in three ways. First by substitution; second by the tapering off method; and third by complete and abrupt cessation. The last is regarded as the most desirable.

Memory is similar in some ways to habit. There are two general sorts: rote and logical memory. Rote memory, we learn, should never be used when logical memory is possible. In certain

and so to a certain extent, they are hardly more characteristic of man than other forms of animal life. The importance of habit has been proved by Professor James. He says that the more we can reduce our daily activities to a daily plan, the more efficient we become. We may ask, therefore, what is habit? Habits are described as something acquired during the life of the individual.[1] They are not born in the individual. [illegible] firmly we develop a habit, we cannot [illegible] for it is acquired from tendency. In physiological terms, habits are new pathways in our nervous system that we [illegible] to make permanent. They perform various functions. They simplify our movements, make our actions more accurate, decrease superfluous activities, and decrease fatigue. We further learn from our study that habits are formed early, other things being equal, and that it is important to form good habits only. We discover that in forming a habit there are three things to keep in mind: First, make the first action as strong as possible; second, repeat it as often as possible; and third, allow nothing to interfere until the habit is firmly fixed. Furthermore, habits can be broken in three ways: first by substitution; second by the lowering of stimuli; and third by complete and abrupt cessation. The last is regarded as the most desirable.

Memory is similar in some ways to habit. There are the general modes, rote and logical memory. Rote memory, we learn, should never be used when logical memory is applicable. In [illegible]

instances, however, rote memory is essential, for example, exact quotations, tables of prices, dates, historical events, etc. When rote memory is used, there are certain principles which may be employed to make the learning easier. First, it it better to learn by wholes than by parts. Second, we should distribute our time properly in such memory work. There are four primary elements associated with memory. First: primary; second, recency: third frequency, and fourth vividness. Memory depends upon several factors; the purpose at the moment; the education of the individual; upon the interest of the individual; heredity; and the effective tone; that is, amount of mental color there is to the matter at hand.

Conversely, we are told that forgetting takes place at a very definite rate depending upon the amount of effort put into the original learning.

There are two laws of association that are really secondary. The first is by contiguity or proximity in space and time. This means that we are likely to remember things that occur in the same general area. The second is that we remember things by similarity and contrast; that is because they are alike or unlike. Nothing is ever remembered in detail. Some parts are remembered, some are filled in and some made up.

The connection between habits and securities is not very marked, but it is possible that the tendency to reduce human activities to habits may account for a good deal of the apparent

lack of reasoning on the part of large numbers of investors. Mechanical actions have no place in the purchase and sale of securities. For example, it would be very unwise to form the habit of buying a stock a certain price under specified conditions regardless of any other factor which might be a dominant influence.

Events in economic and financial history prove that the memory of most investors is very short. People often remember the favorable occurrences, but forget the unfavorable ones. For example, in December 1930, the financial editor of a large metropolitan daily newspaper published a summary of the news that was printed during the depression of 1920 to 1921, and there was a striking similarity between the items at that time and in the 1929 to 1930 depression. Yet very few investors remembered the conditions which brought about the panic of 1920, or if they did they refused to recognize that another depression was in the process of formation.

Instinct. In our study of human activity and its connection with the action of the security markets, we find that the element of instinct is more deeply rooted. The reason for this is fundamental. Instincts developed with the human race, because they were necessary for the welfare of the individual. There are several classifications of instincts: collecting, hoarding, rivalry, possession. These developed because of social relations, in response to the need for social adjust-

ments. Then there are the instincts of perpetuation of the races, which are only a secondary consideration in this discussion, in that increased population has some influence upon production.* Undoubtedly most of these instincts culminate in the action of individuals in the security markets under the heading of the so-called "hunch", particularly those of hoarding, rivalry, possession and collecting. They reflect instinct of self preservation as it concerns the protection of one's securities. Very likely, if a large number of individuals could have been interviewed in the period prior to the big break in the stock market, or before any business depression they would have confessed they had a "hunch" that something was going to happen, but in most cases, the desire for gain overcame the other instincts.

Emotions. That the influence of emotions upon an individual is likely to effect his judgement in the matter of investments appears to be borne out by the facts. Human beings have a number of different sorts of mental experiences, the most elementary of which are the sensations. They do not come to us singly but with other sensations. Feelings usually are thought of as complex compounds of sensations. These are of two sorts, pleasant and unpleasant. Emotions, according to psychologists, are compounds of sensations produced by deep seated and profound changes in the body. The James-Larner theory is probably the best known.** This theory dates back some thirty or thirty five years and was the

* See Tausig "Principles of Economics", Vo. 2, page 209.
**Prof. Chamberlin's Lectures Nov. 8, 1928.

product of these two men working simultaneously but separately. In considering emotions we have to recognize that there are but three principle ones: fear, rage and love, and that all the others, such as jealousy, sorrow, grief, worry, and sympathy are merely compounds of these emotions. They are subjective, due to conditions within us, and they are themselves states of consciousness. They are produced by three kinds of changes that take place in the body; in the blood vessels, in the intestinal muscles, changes in glands and other complex bodily mechanisms. These changes stimulate sensations, and, according to the James Larner theory, it is the compound sensation which constitutes the emotion.

What are the effects of the emotions? Health is probably the most important. It is well known fact that persons who are constantly worried lose weight. Conversely people who are in a happy frame of mind gain weight. The man who troubled about his business and financial affairs finds that he cannot sleep well; his digestive organs do not function properly, and this in turn brings about a general run-down condition, if continued over a very long period. Of all the emotions, or compounds of emotions which are directly noticeable in the attitude of people toward the markets for securities, fear is one of the most influential. To this factor may be traced the duration of most business depressions. People begin to wonder if

their jobs are safe. They do not buy as much as formerly, and commence hoarding their savings. This is discernable in the increased savings at the bottom of a depression. To this influence also is attributed the fact that only a small percentage of investors buy securities at the proper time. When stocks are the cheapest, conditions have the worst appearance, and when stocks are high conditions appear best. Thomas Gibson, a well known economist and student of finance, indicates the following conditions as preceding a major decline in security prices: "High and rising prices of securities, accompanied by heavy general business; expanded credit conditions, showing the full or over-employment of money; high rates for call and time money; large net earnings of railroad and industrial corporations together with increased dividends and extra distributions; low rate of return on money invested; large transactions in securities, with public excitement and enthusiasm; a wide and active range of security prices with alternate sharp declines and rapid recoveries. This,"he states," is the final period of manipulation, during which the public is kept interested and insiders are unloading." The conditions preceding a major advance, he describes as follows: low and usually moderately declining security prices, accompanied by much irregularity in the price movements of specific stocks; general business dull; sound or easy credit conditions and low rates for call and time funds; low railroad

and industrial earnings, some decreased dividends, receiverships and reorganizations; high rate of return or money invested; small transactions in securities, very little outside speculation; a narrow and irregular stock market, with a considerable period of backing and filling, public apathetic and traders bearish. In such times, Mr. Gibson states, farsighted interests take all offerings. There is no logical source for explaining these phenomena than the influence of the emotions upon individuals during times of stress and exiliration. The corner grocery store still does business at the same old stand. There is just as much money available, the basic institutions of government and industry are just as sound. But because of fear, worry and the other elements which make up the emotions, industrial activity slows up, and confidence is not restored until the constant working of economic laws corrects the excesses, and business again is placed upon a solid foundation.

Just as pessimism is the offspring of fear, so optimism is an offspring of hope. Opinions often are based upon hope rather than reasoning. This particularly is true of the man who is holding any article at a loss, no matter what it is. He is more likely to be influenced by his desires than his reasoning. This has created the saying that "The wish is father to the thought".* Under normal conditions the majority of people are optimistic, however. There is more of a tendency to buy securities for a rise, than to sell short. This is

* See "Truth of the Stock Tape" by W.G.Gann, page 16.

natural. Most individuals constantly are looking for better things. Everyone has his dream of the future, and, if he is normal, the dream is optimistic. Hence, nearly everyone makes plans for the future, and these plans always are on the constructive side. This also is borne out by the fact that the upward trend of a business cycle is longer than the subsequent decline, with few exceptions. The expansion in the 1907-1908 cycle took 33 months, and the corresponding contraction 13 months. The 1918-1919 expansion took 44 months, while the corresponding contraction was eight months. In the cycles since 1857, 11 have had a longer period of expansion than contraction. Two had the same number of months in the expansion as in contraction and five had a longer period of contraction than expansion. This indicates that the elements of fear and pessimism spread more rapidly than optimism; that while hope is ever present, fear is caused by a combination of circumstances, and is eliminated as soon as the basis for the emotion is dispelled. This tendency also is noticeable in the predictions of the leading business interests at the beginning of a new year. This may be attributed to the fact that at such times men hesitate making discouraging statements, because of the effect ~~it~~ they may have upon conditions, but at the same time, it also may be due in part to the unconscious desire on the part of most people to look

on the bright side of things.

<u>Crowd or mob psychology</u>. The tendency toward crowd psychology has become more marked since the development in methods of communication in recent years. In the early history of this country communication was very slow, and events did not become known in various sections of the country until several weeks after they occured. The development of the telegraph, the telephone and more recently the radio, has greatly speeded up the dissimulation of news. These factors have resulted in an increase in action by large number of individuals at a given time. It is first necessary to distinguish between crowd and mob psychology, however. A crowd is described in psychological terms as a group of people not within one area. They are separated geographically. By a mob is meant people within a given area. In a mob the sense of self is decreased, and the emotions may spread very rapidly because of the close physical contact. It experiences a narrowing of the field of consciousness and an expulsion of outside impressions. It is dominated by a central purpose. It usually is possible to tell when a mob is in the process of formation. There is a tendency for people to hold their breath. Everything is quiet and it is possible to hear the proverbial "pin" drop. This characteristic is not limited to any one group of individuals. An experienced group of people may easily be turned into a mob, because the influences which prevail at such times lessen

reasoning power. Some people are able to withstand the excitement of such occasions, however. There are two kinds who are less likely to be drawn into them. First are the intelligent. They are able to criticize the suggestion and appraise it. The ignorant are the mercy of the leader of the mob. The second are the fanatical or impatient people.

Feelings run through a crowd quicker than ideas do. The person with the loud voice and big physique is apt to attract attention regardless whether his proposals are sensible or not. The mob leader, therefore, is important because people follow him as sheep follow a bell. He is a tremendous source of potential damage if the aim is an unworthy one. If the leader is a bad individual the results will be bad. One saving factor of the mob however, is that it cannot last long unless it is being constantly augmented by others. The reason is because its attention leads to fatigue. A mob has a number of characteristics. It is prejudiced, irrational, simple minded and almost single mined ,and unmoral.

The characteristics of both the crowd and the mob are discernible in following styles in the clothing, smoking, attitude of attendents at foot ball and base ball games, land booms, prize fights and the stock market. There is a constant desire for leadership. Someone sets the styles and everyone wears their clothes in accordance with the prescribed

pattern. Anyone who tries to be original is looked upon as fanactic. In boxing matches there is an unreasoning favoritism toward one of the combatants, usually the one who is believed to have the less chance to win. At football games, the crowd is carried away by a sudden feat of skill, or if the favorite team scores an unexpected point or wins a close victory. The same tendencies are recognizable in the security markets. A well-known stock market "plunger" is sure to have a large following if his activities become known, or if he makes an encouraging statement regarding some particular stock. In the same manner, a big break in the market causes most investors to throw over their holdings for whatever price they will bring, in a desire to "get out from under". To this factor is attributed the well-known truth that price declines always go too far. It is more noticeable in a decline than during a rising market because the tendency toward crowd psychology is more marked at such times. Rising prices are more orderly and more leisurely developed. People are in a happy and serene frame of mind if they are making money, but the minute the market turns against them, all the emotions and instincts which have been in the process of formation since the human race began are brought into play. When this happens, the fury of the mob becomes evident and many are hurt in the results.* Two good illustrations of the effect of mob violence

* See Appendix., page 108, Oct. 24, 1929

pattern. Anyone who triumphs as original is looked upon as fantastic. In boxing matches there is an unreasoning favoritism toward one of the contestants, usually the one who is believed to have the less chance to win. At football games, the crowd is carried away by a sudden dash of skill, or if the favorite team scores an unexpected point or wins a close victory. The same tendencies are recognizable in the security markets. A well-known stock market "plunger" is sure to have a large following if his activities become known, or if he makes an encouraging statement regarding some particular stock. In the same manner, a big break in the market causes most investors to throw over their holdings for whatever price they will bring, in a desire to "get out from under". To this factor is attributed the well-known truth that price declines always go too far. It is more noticeable in a decline than during a rising market because the tendency toward crowd psychology is more marked at such times. Rising prices are more orderly and more leisurely developed. People are in a happy and serene frame of mind if they are making money, but the minute the market turns against them, all the emotions and instincts which have been in the process of formation since the human race began are brought into play. When this happens, the fury of the mob becomes evident and many are hurt in the results.* Two good illustrations of the effect of mob-violence

* See Appendix., page 108. Oct. 24,1929

in the past half century were the police strike in Boston in 1919; and the Iroquois Theatre fire in Chicago some 30 years ago. The latter is perhaps the better illustration of the two, for people were trampled to death by the scores in a frenzied desire of the mob to get out. The 1929 stock market crash revealed the same frame of mind, only fortunes were wrecked rather than lives.

Morale. There comes a time in all business and financial cycles when the crowd becomes almost if not completely demoralized. It is important therefore, to learn what constitutes morale. It may be defined as the mental condition of the individual or individuals. When this is satisfactory, morale is said to be high or good, and when mental condition is unsatisfactory, we say that morale is poor or low. The term often is improperly used in public conversation for it is frequently given the meaning of only satisfactory mental condition. Thorndyke has listed what he thinks are original tendencies.* They are called the laws of readiness and unreadiness. The first is as follows: If a nervous pathway is set for a particular action, it satisfies us when we carry out that action without any hindrance. In other words, it pleases us to do what we want to do. The second is that if a nervous pathway is set or ready for a particular action and it is not able to complete it, we have a resulting feeling of annoyance. The third is that if a conditioned unit is not set for a particular

* Prof. Chamberlin's Lectures, March 7, 1928.

action, to be forced to carry it out is dissatisfying. It is unsatisfying to do what we do not want to do. There are certain conditions which lead to high morale and certain conditions which lead to low morale. The first are external to the individual, and the second are subjective conditions. We must recognize, however, that external conditions become factors in morale only when they are transferred into subjective conditions. In the first group the external conditons we should put such things as lighting, or illumination, ventilation, heating, rest rooms, recreational facilities and social enviroment. Under the subjective conditions we may have such factors as happiness, a share in the business, satisfactory leadership, opportunity for advancement, fair living wages, educational opportunities, health and its implications, etc. While these factors have no direct bearing upon the psychological attitude of the investor, they are important insofar as they effect his judgement and aid him in making wise choices. The conditions which lead to a state of high morale among investors are steady or rising prices. Morale is highest at the end of a "bull" market, and lowest at the bottom of a "bear" market, or, in fact, any development of the "boom" variety. There is a good deal of satisfaction in buying a stock or bond or anything else and be able to sell it in a few hours or days for a higher price. There likewise is a depressing influence in having one's property decline in price from the original cost. The cycles in business and

the stock market then, must be defined as something inherent in human nature. This is demonstrated in the fact that statistics show activity is highest at the top of a rising cycle, and lowest at the bottom of a declining movement. During the year 1929 there were over a billion shares bought and sold on the New York Stock Exchange, and the market value of all securities reaches its highest figure during that period, amounting to \$89,668,276,874. In the following year, the total value of securities dropped to \$49,019,878,459, and the total number of shares exchanged was around 800,million. Had it not been for the fact that there were more new shares of stock put out in the period from 1924 to 1928 than in any previous period, thereby creating a wider distribution, the number of shares dealt in on the exchange in 1930 undoubtedly would have been considerably less.

Very few people seem to be able to withstand a drastic decline in the price of the stocks they are holding. The mental strain is severe. When one has worked hard to build up a surplus, it is demoralizing to see this capital shrink daily without knowing when the decline will stop. One has to go through such a situation in order to experience the sensations. It is like going into a battle. One may think how he might act under fire, but he never knows until he has been there. It is the same in a market crash. The investor cannot say whether or not he will hold courageously to his stocks in the

The stock market crash, which we attribute to something inherent to human nature. This is demonstrated in the fact that securities show activity is highest at the top of a rising market and lowest at the bottom of a declining movement. During the year 1929 there were over a billion shares bought and sold on the New York Stock Exchange, and the market value of all securities reached its highest figure during that period, amounting to $89,668,276,854. In the following year, the total value of securities dropped to [illegible], and the total number of shares exchanged was around 800 million. Had it not been for the fact that there were many new shares of stock put out in the period from 1925 to 1929 than in any previous period, thereby creating a wider distribution, the number of shares dealt in on the exchange in 1930 undoubtedly would have been considerably less.

Very few people seem to be able to withstand a drastic decline in the price of the stocks they are holding. The mental strain is severe. When one has worked hard to build up a surplus, it is demoralizing to see this capital shrink daily without knowing when the decline will stop. One has to go through such a situation in order to understand that sometimes it is like going into a battle. Anything [illegible] can be said not under fire, but he never knows until he has been there. It is the same in a market crash. The investor never knows whether or not he will hold courageously to his stocks in the

face of demoralized market until he actually has been in such a position.

Suggestion. The Century dictionary described suggestion as follows: "the action of an idea in bringing another idea to mind, either through the force of association or by virtue of the natural connection of the ideas. Specifically in hypnotism, the insinuation of a belief or impulse into the mind of the subject by any means, as by words or gestures, usually by emphatic declaration; also, the impulse of trust and submission which leads to the effectiveness of such incitement; also the idea so suggested". The American Journal of Psychology is quoted as saying that "Suggestion appears to be entirely a phenomenon of unconscious memory". Hamilton, Reid's Works are quoted as follows: "Let it not be supposed that the terms suggest and suggestion are, in their psychological relation, of recent or even modern, application; for so applied, they are old, the oldest we possess. In this relative signification, suggero, the verb, ascends to Cicero; and suggestio, the noun, is a household expression of Tertullian and St. Augustine."

The most common view of suggestion is that it is characteristic of all normal people.* Every one is suggestible. Sometimes, however, a person is more suggestible than at other times. Prof. Chamberlin says that if we define suggestion in the terms of normal people, we may say it is the communication of any proposition from one person or person to another in such a way as

* Prof. Chamberlin's Lectures, Feb. 28, 1929.

to secure its acceptance with conviction in the absence of adequate logical grounds. This leads to the question: What are the conditons that favor the operation of suggestion in normal minds? The answer is: first, those conditions that are found in the subject himself; and second, those that are found in the sources from which the suggestion comes. People often are suggestible because of lack of knowledge or because of a firmly fixed belief about a thing. The highly trained mind is relatively unsuggestible; first, because it has a large store of knowledge and belief; and second; because the knowledge is systematically organized. Young people, savages and unintelligent people are extremely suggestible. A person is not equally suggestible at all times, the least so when wide-awake and alert, and the most so when fatigued or in poor physical condition. Emotional disturbances favor suggestibility. This was particularly noticeable in the World War. Not much effort was required to work a crowd up into a high state of excitement. People are always more suggestible in times of high nervous tension. This was noticeable in the summer of 1929, when millions were "playing the stock market". Rumors of the wildest sort were received with conviction.* In April 1929, a traveling salesman, who mingled with all sorts of people, told the writer some of the rumors he had heard. General Motors, he had been told, was going to $1000 a share, American Can $2000 and other stocks were going up in like

* See Appendix, page105, Aug.1, 1929, Aug.7, 1929, Aug.16, 1929 Sept. 16, 1929.

manner. He did not seem to question the possibility that they might not. This is but one example of the power of suggestion during a great upward movement in stocks.* On the other side of the picture, wild rumors of pending disaster are circulated during the last stages of a "bear" market, and are accepted by those who have worked themselves into a frame of mind to believe anything.

A group of people, of course, are more suggestive in producing results than a single person. The larger the group, the more the influence. The writers of tipster sheets, and those who circulate false rumors capitalize these tendencies. They know that during times of rapidly advancing stock prices, it is easier to sell stocks of little value, because people are highly suggestible at such times, and believe almost anything, especially if it is in printed form. Mass suggestion, therefore, is most effective. Promoters know that if they can get a large number of people to act as they wish them to, their propostion will be more successful, at least so far as they are concerned, than if they sold the stock individually to a few people. Some examples of mass suggestion in the ten years from 1920 to 1930 were the Ponzi Scheme, the Florida Land Boom and the "Coolidge" bull market. The South Sea Bubble was one of the old swindles which relied upon mass suggestion for its success.

Auto or self suggestion denotes a mental process which produces in the minds of many people a condition that is not warranted

*See Appendix, pages 100 to 116.

by any grounds at all. The subject and the agent are the same. This is noticeable among investors who form a conclusion and then ask the opinion of someone else. If the opinion of the other party agrees with theirs, all is well. If not, they will argue and sometimes get angry if the other party persists in disagreeing with them.

Practically everyone is influenced by suggestion at some time or other, psychologists tell us, and about 90% of all people can be hypnotized.* Included in the 10% who are not hipnotizable are idiots and feeble minded persons. The number of people, therefore, who are not susceptible to suggestion are relatively small. Applying this principle to the great mass of suggestion experienced in the market for securities, it is easy to comprehend how the great majority of individuals who do not understand this truth may be led astray by wild rumors during periods of excitement.**

Pool operators realize the power of suggestion and lay their plans accordingly. A pool, in financial terminology, is an association of individuals, each of whom subscribes a sum of money, for the purpose of operating in certain securities. In other words, they buy stocks, and through adroit manipulation succeed in attracting public interest in them. When the stocks have advanced to the point agreed upon, the pool sells its holdings and divides the profit. How do they succeed in attracting a public interest in the stock? Simply by using the timeworn power of

* Prof. Chamberlin's Lectures, Feb. 28, 1929.
** See Appendix,page105, Aug.1,1929

suggestion. They know that the most powerful attraction to a stock is an advancing price. They also know that investors are not attracted to stocks in large numbers until they have had a substantial advance. Therefore, in order to accumulate a large number of shares, they must first depress the stock to get the nervous holders to sell. Then, when they have acquired the number of shares agreed upon, they start bidding it up, and frequently circulate favorable statements regarding the outlook for the company or companies in which they are interested. Usually, the statements have a considerable degree of truth, as the best organized pool chooses stocks in which the prospects are favorable, but in certain stages or a rising market, it is to be feared that many of the statements are very questionable if not downright falsehoods. But, whether true or false, they serve their purpose.*

<u>Price changes due in part to individual difference</u>. We have found, in our study of "intelligence", that differences in individuals are due to a number of factors, such as social conditions, environment, age, sex, maturity, etc. Furthermore, if we took any one trait and measured it with a sufficiently large number of individuals, we would arrive at what is known as a normal curve of distribution, or a line resembling an inverted bowl. This factor, therefore, involves mental efficiency, which is approached in a number of different ways as a basis for study. There is a difference of opinion, also, as to what factors are

* See Appendix., page 105, Aug.1,1929.

the dominant ones. First let us consider the social point of view. *Threadbolt maintains that mental efficiency depends upon the environment in which an individual is born. For instance, a person in the heart of Africa is entirely different from one in America in his mental outlook upon life. The biological point of view considers family history. Pathological point of view refers to the science of diseases and the effect these have upon mental growth. This view is more or less opposed to the psychological doctrine which is more interested in the behavior of an individual than the cause. The anthropological point of view classifies individuals according to their mental efficiency and in this classification it is found that some feeble minded people are partly in the normal curve of distribution. Idiots, imbeciles and morons are divided into three types, low, middles and high. Many high morons are found in industrial life, and inasmuch as some of them are able to accumulate surplus funds, it is reasonable to assume that this type of individual frequently endeavors to increase his capital through the medium of the stock market. The glandular point of view deals with the ductless glands. The psychological point of view places the emphasis upon the behavior of individuals. Finally, we have the quantative point of view, which includes the Malthusian theory. Malthus maintained that the cause of low wages and of poverty lay in the large numbers of mankind; that there was a tendency of population to press upon subsistence and keep wages low; that a rise in wages could not take

* Prof. Chamberlin's Lectures, March 14, 1929.

place unless the tendency to increase among the laboring classes was checked.*

Whatever the cause may be, it is an undisputed truth that no two people are alike. It also is true that differences become more marked as people grow older. Children who play together every day and are in the same neighborhood all the time have a great deal in common until they go into business, or profession. Then they are subject to different influences. These tend to change them and often some little event in a person's life will change his whole career. Then too, each individual has a dual personality. One is the personality that the friends and acquaintances see and recognize. The other is one's inner consciousness. One can never tell exactly what is going on in another person's mind. In other words, it is impossible to tell what the other fellow is thinking about. People who live in separate sections of the same country usually have different ideas. One section may advance more rapidly than others, due to the locality being more important from a trade standpoint; having been settled earlier, or being endowed with better natural resources. These differences even are recognized in the speech of the individual. A person who is born and brought up in New York, has a manner of talking that is entirely different from the Westerner or Southerner.

Besides these obvious differences, psychological tests and scales have been developed to measure the individual differences. First is the test of special abilities, either

* Principles of Economics, Tausig, Vol. II, Page 209

inherited or acquired. Included in this test is the measurement of single specific traits, sensory acuity of keenness, higher mental processes, motor co-ordination and personality traits. Vocational and trade tests also are included in this classification. Second are the general intelligence or mental alertness tests. These are divided into two classifications, individual and group, and each classification is separate as to literate and illiterate individuals. Third are the personality rating scales, which include self-rating and concensus of opinion. These tests prove conclusively that in any group of individuals, there is a wide range of differences in the special traits and higher mental processes, the latter referring to memory, reasoning and judgement. The results when placed in chart or graph form, make a cone shaped line called the normal curve of distribution. If there were no differences the line would be straight. Some of the tests that have been conducted to determine individual differences are Knox cube test; Truman Lee Kelly's material test, the Stenquist test, Ruediger puzzle box, Dr. Colvin's intelligence test, Downey profile test. General intelligence tests include the Stanford University examination, Army performance scale, Army Alpha scale and the Army Beta scale.

When all these variations in the human elements are considers, it is apparent that fluctuations in the stock market and in other organized markets are caused in large measure by the differences in individuals. The alert individual who

has money to invest would be quicker to recognize and to take advantage of developments in trade and economic conditions, while his less fortunate brother would wait until there was more visible evidence of improvement. Even though the alert individual was not trained along financial lines, he would back up lack of knowledge by consulting someone of wide experience in such matters.

On the other hand, an investor might be alert, intelligent and have excellent reasoning powers, but if he did not have sufficient aggressiveness to carry out his plans, he would lose his opportunity. A good deal of courage is necessary to buy securities when everyone is pessimistic and there are wild rumors of pending disaster. Nevertheless, experience has shown that the keenest financiers and business men buy securities at just such times, and these men are the ones who make the real money in the stock market.

It may be argued, of course, that market fluctuations sometimes are due to other causes than individual differences. This is true to a certain extent, but it must be realized that all human activity is influenced by this factor, so in the last analysis, about the only events that cannot be traced to the human element are the accidents of nature, such as earthquakes, floods, tornadoes, plagues, etc. Certainly wars, economic developments, trade depressions, etc., are traceable to the activities of individuals in a large measure, and the dif-

ferences in human nature are chiefly responsible for these developments.

Attention, interest and will.* These factors should be considered together, for attention and interest are merely synonymous terms and represent only the different points of view between exactly the same questions. There is no necessity of proving that there is such a thing as attention. Attentive states are continuous and follow one from the other without any break, but the stream of consciousness has valleys and peaks and if continued far enough will have level places. In these conscious states that which is at the high point, represents the focus of consciousness, and any outlying hillsides represent the fringe of consciousness. We may have a focus and a fringe of consciousness at any particular moment. Attention which is represented by a perfectly straight line can only be gotten by fanaticism or hypnosis; probably never in normal states. The position of "no attention" probably does not exist at all. Some think that in sleep there is no attention, but it is better to think that attention is present during sleep but at a fixed plane. We never have such a thing as inattention. The question arises, however, as to how many things we may pay attention to at the same time. It is probable that we may be attentive to but one thing at a time. Where we appear to be giving attention to more than one thing we really have rapidly changing attention.

[illegible]

ences.

Attention, Interest and Will.* [illegible] considered together. [illegible] between exactly the same phenomena. There is no way of proving that there is such a thing as attention. [illegible]

[illegible] of consciousness. [illegible] of consciousness at any particular moment. [illegible] normal states. [illegible]

There are several kinds of attention. First is involuntary attention, which takes place while the mind is passive. In fact, it sometimes is called passive attention. The second is voluntary or active attention. This is required when it is necessary for us to make a choice. The third is similar to the first, namely secondary passive attention, which is the kind we give to acquired interests.

Attention as applied to the stock market is seldom passive. It may be secondary passive on the part of people who "take a flyer" in the stock market, and by those people who watch the stock market reports from day to day to determine whether their securities are going up or down. The active attention is given by the professional traders, brokers, and those otherwise interested in the market.

The hills and valleys of attention may be responsible in part to the curves of market fluctuations. It is highest at the top of a market rise, and lowest at the bottom. This is also indicated by the fact that more people are interested in stocks at the top of a move and less at the bottom.* The fact that we are not able to give attention to a great many incidents at the same time is one reason why an investor should not have too many securities to look after.

* See Appendix, page 108.

## OTHER EFFECTS OF THE HUMAN ELEMENT UPON SECURITIES.

One effect of the psychological element upon securities is reflected in the volume of transactions. In the early life of the New York Stock Exchange the number of shares bought and sold was very small, the lowest volume in the history of the exchange being 31 shares on Mar. 16, 1830.* With the growth of the country and the increase in the corporate form of business more shares were placed on the market, but volume did not assume large proportions until the bull market that culminated in 1929. In certain stages of a rising market, usually near the end, volume is largest, and this also is true in a declining market. Volume tends to increase as the climactic stage approaches. Students of the stock market characterize such periods in a decline as "clean up" day. By this they mean that such factors as marginal selling, professional, or short selling and liquidation by frightened holders has reached the peak. After this there is a period of calm, like the aftermath of a severe storm.

Classes of stocks. The character of various stocks determine the effect that psychology may have upon them during period when this element is the dominant factor. Sound stocks are not influenced as much as the more speculative issues, but in the final stages of a decline, when fear becomes widespread,

* New York Stock Exchange Year Book - 1929-1930, Page 14.

the good stocks are thrown over with the poor ones. Preferred stocks of the strongest companies occupy a position comparable with a bond in that they are not subject to wide fluctuations because of the fixed dividend. The preferred stocks of the weaker companies, however, are apt to be sold as freely as the speculative common stocks in a period of general liquidation. Furthermore, in recent years there has developed a more common use of the conversion feature in stock issues. The demand for common stocks in the past decade made the marketability of the fixed income issues negligible. Consequently, in order to make such stocks attractive, they were made convertible into the common stocks. In some instances stock purchase warrants were attached. These issues were bid up with other equity stocks in the speculative era which culminated in September 1929, and had a corresponding drop in the subsequent deflation. One of the many examples of this development was Midland Steel Products participating preferred stock which sold as high as $321 a share in 1929 and subsequently fell to 135. On the other hand, the preferred stocks of the sound industrial and utility companies fluctuated in a relatively narrow range. United States Steel Corporation preferred, for example, sold as high as $151\frac{1}{4}$ in 1930 as compared with a low of 137 in 1929. Following a deflation, the pendulum is apt to swing the other

way. Fixed income securities become more popular. Safety of principal is given greater consideration. As a result the bond market becomes stronger, increased demand causes higher prices for this type of security. First the highest grade issues rise; then as the yields on these securities grows smaller, investors turn their attention to the second grade bonds. Then the speculative bonds attract attention together with preferred stocks. In the final stage attention again is turned to equities; that is, common stocks. This constitutes the so-called "vicious circle" in the investment world. Its action is continuous, and is a result of the psychological factors previously outlined.

Another factor which is likely to influence the attitude of the investor is the kind of industry a stock represents. A business which has a stable earning power and is of an essential nature, commands more of an investment rating than a new or hazardous business. The soundest industrial companies, such as the leading steel, food, chemical, automobile and other firms manufacturing or producing the necessities of life are less hazardous than most oil stocks. On the other hand, economic conditions may cause some of these stocks to become speculative, at least for a time. The textile stocks, previously referred to, are striking illustrations of this point. American Woolen Company preferred and common stocks were at one time considered good investments, but during the period following the World War these shares declined to the point that they were considered un-

desirable even for speculators. The majority of the other textile stocks were in about the same position. The railroad stocks occupied a similar position during and following the period of government control. The New Haven Railroad, for example, was in such an uncertain condition at one time that the common stock sold as low as $9 a share, and there was talk of a receivership. Most of the other railroad shares sold at exceedingly low prices.

The public utility companies have enjoyed a greater degree of stability than many other groups because of their steady earning power, but even here the human element has wrought some startling situations. Professor William Z. Ripley in his book, "Main Street and Wall Street", mentions some flagrant cases of overcapitalization, mismanagement, and improper distribution of properties among public utility companies.* These factors are influential in the prices the stocks of these concerns may command. An overcapitalized company cannot show large earning power on its securities. Its funded debt may be excessive, or its total capitalization may be so large that stockholders are obliged to wait many years before they can realize anything on their investment. Mismanagement will ruin any company, and a utility company that has part of its property in New England, more in the Southwest and other units in the Philippine Islands or some

*Main Street and Wall Street, William Z. Ripley, page 276, chapter 10.

desirable even for speculators. The majority of the other textile shares were in about the same position. The railroads occupied a similar position during and following the period of government control. The New Haven Railroad, for example, was in such an uncertain condition at one time that the common stock sold as low as 10 a share, and there was talk of a receivership. Most of the other railroad shares sold at exceedingly low prices.

The public utility companies have enjoyed a greater degree of stability than many other groups because of their steady earning power, but even here the hand of greed has wrought some startling situations. Professor William Z. Ripley in his book, "Main Street and Wall Street", mentions some flagrant cases of overcapitalization, mismanagement, and improper distribution of securities among public utility companies.* These factors are influential in the prices the stocks of these concerns may command. An overcapitalized company cannot show large earning power on its securities. The capital stock may be excessive, or the total capitalization may be so large that stockholders are obliged to wait many years before they can realize anything on their investment. Mismanagement will wreck any company, and a utility company that has much of its property in far isolated towns in the [illegible] and other units in [illegible]

* Main Street and Wall Street, [illegible] page [illegible], chapter [illegible].

other remote place, can hardly have close co-ordination in in its operations.

Mining and oil stocks are about the most hazardous of all groups. The reason is obvious. Their value is dependent upon the amount of oil or ore they are able to extract from the ground. This is an uncertain quantity at best, despite the fact that modern engineering methods have enabled them to gauge fairly accurately the amount of these commodities in a given section. Furthermore, investors seldom take into consideration the fact that most oil and mining companies are liquidating propositions. Every pound of ore or gallon of oil taken out of the ground, reduces by that much the remaining assets, and eventually there comes a time when new sources of supply must be found or the company must cease operating. Some mining companies, like Anaconda Copper Mining Co. and American Smelting & Refining Co. have a manufacturing subsidiary, so they are more in the nature of industrial concerns than mining companies. Furthermore, some oil companies, like Standard Oil Company of New Jersey, have widely diversified interests. On the whole, however, oil and mining companies have a distinctly limited and uncertain life.

<u>Indexes.</u> * It previously has been mentioned that investors endeavor to gauge stock market movement through certain yard-stick methods, of which charts are the most common. There are, however, certain barometers that gauge quite accurately the human

* See Appendix.

activities in business and finance. Prices and production of all the basic industries are followed closely. The unfilled tonnage statement of the United States Steel Corporation, published at the end of every month indicates the trend of steel operations. The Dow-Jones Company, publishers of the Wall Street Journal, Boston News Bureau and other publications, compiles the percentage of steel operations weekly as compared with a theoretical capacity. Pig iron and scrap steel prices indicate increase or decrease in demand for steel products. Railroad car loadings measure the volume of goods being moved. Bank clearings are an index to the state of credit and volume of business being transacted. Increased activity means a larger amount of business. Foreign trade figures published monthly by the United States Department of Commerce show the extent of commerce with other countries.

There are several commodity price index numbers, the ones most commonly used being those compiled by Dun, Bradstreet, The United States Department of Labor Bureau of Labor Statistics, and Professor Fisher's Weekly Index of Wholesale Commodity prices. These index numbers measure the trend of business activity. The Anabist's index of industrial production also indicates the trend of business.

Automobile production figures have become important in determining business conditions because of the widespread

influence of this industry upon other lines of business. A total production of 5,000,000 units a year naturally would indicate more active business than half that amount.

Increase or decrease in total building permits and contracts awarded is another factor to guide the business man or investor in determining the trend of business and stock prices. Developments in the farm industry have considerable importance. High prices for farm products mean increased purchasing power for a large number of people, other factors being equal, and low prices have a reverse influence. Retail store sales are an indication of the rate of consumption. The growth of chain stores in recent years also has become a barometer of retrail trade conditions.

Money rates follow business activity. It has been pointed out that the condition of credit has a direct bearing upon business and stock prices. High money rates are brought about by increased activity and an overextension of credit. Low money rates follow decreased production and ultimately aid in resumption of business activity when the necessary adjustments in supply and demand have been completed. *

Obviously statistical data are of primary importance to the investor, measuring as they do, the trend of human activity. But statistical records of any sort are liable to be inaccurate, and the margin of error is increased when the statistics deal

* See Appendix, page 105, August 13,1929

with human relationships.* As indicators of general trends, however, they are valuable, but it is always necessary to use judgement and discretion in their interpretations.* Not only is it important to be able to recognize the trend of the barometers, but to heed the signs when they appear. This is one of the hardest things for the majority of investors and speculators to do. They often may recognize the signs, but more often do not act accordingly. High money rates in 1929 before the crash were given scant attention by speculators. Even the warning of so eminent an authority Secretary of the Treasury Andrew J. Mellon, early in 1929 that it was "a good time to buy bonds" failed to dampen the enthusiasm of the speculator.

What brings a turn? Quite frequently the question is asked: "What makes securities stop going down in a liquidating movement, when pessimism is almost universal?" There is a good deal of logic behind this question. It may be answered, however, by calling attention once more to the psychological truth that a small percentage of individuals do not follow the crowd. They are the ones who are willing to buy stocks and bonds, but "at a price". There is a purchaser for every seller, and, during the period when fear is rampant, those individuals call up their broker and name prices at which they are willing to purchase stocks. It was reported, for example, that during the break in October and November, 1929, brokers had

* Forecasting Stock Market Trends, P. 293, Van Strum.

orders to buy American Telephone stock at 150. The stock did not decline to that figure, but this illustrates the point that no matter how dark and gloomy the situation is, there are some people who have money, and the courage to buy good securities if they can get them at fair prices. As the general level of prices becomes lower, the number of these people increases, until the point finally is reached when the demand from this source equals or exceeds the supply of stocks offered. This brings about the so-called "turn".* The buyers are aided in this by the activities of the "short" interest. The short sellers sell stocks with the idea of buying them at a lower price. When the market shows evidences of becoming oversold, they buy the stocks they have sold previously, or "cover". Here again, the human element asserts itself, because there is a larger number of short sellers at the end of a decline than at the beginning. When stock prices start to rise and give evidence that the recovery may be substantial, the "shorts" begin to "cover" and this tends to accentuate the rise.

Bonds. Bonds usually are the senior indebtedness of a company. They may or may not be secured by a mortgage. The rate of interest is fixed and the majority of bonds are callable at a stated price at a designated time. For this reason the fluctuations in bonds are not so marked as in common stocks, with the exception of those issues which have additional conversation features or have stock purchase warrants attached to them. But at the same time, bonds are influenced by underlying

*See Appendix, page 108, Nov.13,1929.

conditions to a considerable extent. Low money rates, for example, usually create higher prices for bonds. Here again the human element is noticeable. It is good business to place surplus funds in sound bonds yielding from $4\frac{1}{2}\%$ to $5\frac{1}{2}\%$ when the return on collateral loans and commercial paper is 2 to 3%. The increased demand creates higher prices. Conversely, when call money and commercial paper rates rise, the income from bonds is not so attractive, and more funds are placed in the sources offering the highest return. There also may be considerable selling of bonds in order to take advantage of the higher rates elsewhere. This brings about lower prices for bonds. For this reason the bond market is watched to ascertain possible trend of stock prices. Under normal conditions, rising bond prices precede higher stock prices and a decline in bonds normally is a forerunner of a decline in stocks. There may be a considerable elapse of time during the movements of the different class of securities, however, and for this reason the relationship between the movements sometimes is lost sight of, but the reasons for an advance or decline in bond prices are so fundamental that it is unwise to ignore them. Fluctuations in the bond market not only are indicative of future stock prices but of business con d itions as well. Higher bond prices indicate confidence in the business outlook.

Too often, however, investors overemphasize the element of safety in a bond. Whilte bonds have priority over stock they are just as dependent upon the soundness and earning capacity of a

company. Consequently, when the earning power of a concern is so reduced that its future outlook is obscure, the bonds of the company are as likely to decline as the stocks, although not always in the same proportion. Then, too, a great deal depends upon the capitalization of a company. When a corporation has no funded debt, the earnings accrue to the stockholders, but when the funded indebtedness is large, holders of the junior bonds may be in a less desirable position than the stockholders of a company with simple capital structure. It may easily be recognized, therefore, that one cannot say that bonds always are better than stocks. Such a statement depends upon circumstances.

In the event of a reorganization, bondholders usually, but not always, fare better than holders of the common shares. First mortgage bondholders receive the best offer in such an event because their bonds are secured by a mortgage upon the property, and often the reorganization is brought about by a committee of bondholders. Preferred shareholders usually receive some consideration, and the common shareholders may or may not participate. There have been many cases, of course, in which all classes of securities have been wiped out. This is indicated by records of thousands of obsolete companies, which may be found at every State capital.

The public demand for common stocks in the bull market which ended in 1929 created a great increase in the number of bonds with speculative features. In fact, the total value of

bonds issued during 1929 without some feature of this sort was very small, and was confined to the soundest industrial railroad or utility companies. With the lessening of the speculative craze for commonstocks, however, bonds without these additional attractions again became more popular.

## CONCLUSIONS

Market for securities essential in present economic life.

At the bottom of every business depression and financial panic, a great deal of talk is made about abolishing the markets of securities. These statements usually originate with individuals who have been financially crippled in the decline or from men who desire publicity, either for political reasons or otherwise. It is conceivable that an unorganized market for securities would bring about an undesirable state of affairs. While it is true that many abuses have materialized in the security markets, the fault is not so much with the market as in the attitude of the public. Those who desire to gamble have found the stock market an excellent medium. But the stock market does not possess a monopoly upon the human desire to "take a chance", as we have pointed out. Furthermore,an organized stock market gives investors a ready source for turning their securities into cash in the shortest possible time. It causes more frequent publication of earnings and financial standing of the companies whose stocks are listed. The losses that are sustained in the stock market are just as real in other forms of investment. The purchaser of real estate is obliged to experience a similar fluctuation in value, except that when the market value of his house goes down he does not sell, because he wants to live in it. Whenever the speculative element becomes active in any form of human endeavor, excesses materialize and losses are sustained. Therefore, the conclusion which may be reached as to the necessity

[illegible]

[illegible]

In the [illegible] of [illegible] magazine, newspaper and financial pages, a great deal of [illegible] of securities. [illegible] It is [illegible] [illegible]. [illegible]

[illegible]

for an organized market for securities is that it aids the real investor; that as far as speculation is concerned, the whole history of the human race has revealed that this is an inherent trait, and that the remedy for the evils which arise consists not in the elimination of the source but in its proper regulation.

The matter of regulation, however, brings up a rather controversial subject. The attitude of the stock exchange authorities has been that this institution should provide a free and open market for securities. This has caused the complaint that certain undesirable practices have crept into the business. During the very active days in 1929, when the "tape" was an hour to three or more hours behind the actual transactions, the person who bought or sold stocks could not tell whether he was getting a fair price. It was a comparatively easy matter for a broker to deduct a fraction or even a point or more from the price received. Suppose, for example, a customer ordered his broker to sell "at the market". The broker might easily credit the sale on his customer's account at 50, although he had sold the stock for 50½ or even 51. With the ticker several hours late, and with daily fluctuations over a wide range, the customer would be at a disadvantage in determining whether the stock was sold at the price which he was credited. In fact, complaints were quite frequent during 1929 from customers of brokerage offices that when they wished

for an organized market for securities is that it is the real inventory; that as far as speculation is concerned, the whole history of the human race has revealed that this is an inherent trait, and that the remedy for the evils which exist consists not in the elimination of the source but in its proper regulation.

The matter of regulation, however, brings up a rather controversial subject. The attitude of the stock exchange authorities has been that this institution should provide a free and open market for securities. This has caused the complaint that certain undesirable practices have crept into the business. During the early boom days in 1929, when the "tape" was an hour to three or more hours behind the actual transactions, the person who bought or sold stocks could not tell whether he was getting a fair price. It was a comparatively easy matter for a broker to deduct a fraction or even a point or more from the price received. Suppose, for example, a customer ordered his broker to sell "at the market". The broker might easily credit the sale on his customer's account at 60, although he had sold the stock for 60½ or even 61. With the ticker several hours late, and with daily fluctuations over a wide range, the customer would be at a disadvantage in determining whether the stock was sold at the price which he was credited. In fact, complaints were quite frequent during 1929 from customers of brokerage offices that when they wished

to sell, the price they received was the low for the day, but when they bought the price always was at the high for the day.

The adoption of the "high-speed" tickers by the Western Union Telegraph Company, has eliminated one phase of this practice, in that the transactions are printed on the tape soon after they are completed, but in the event of another period of extreme activity, the same situation might materialize again. The only way to completely eliminate such practices would be to adopt a rule to make customers name a price for purchase or sale, but this could not be adopted without wider knowledge of the actual value of the various shares. In any event, the purchase or sale "at the market", gives a brokerage firm considerable advantage over the customer if it is the type of firm to do so. It may be argued that this is a trivial matter, but it could and probably has involved millions of dollars in past years.

The need for regulation also is desirable in the calibre of the men who receive licenses to deal in stocks including brokers, salesmen, customers' men and those who otherwise are in a position to influence the investing public in the selection of securities. Most investors accept the opinion of these individuals as authoritative, but, as previously has been pointed out, these men too frequently are more concerned in selling securities underwritten by their own organizations, or in getting the largest possible commissions, than in the best

interest of the customer. Certainly, men who are placed in a position to advise investors regarding the best type of securities for their particular needs, should be men who have had sufficient experience, and who have demonstrated that their judgement is sound.

Education. But at the same time, brokers and their associates frequently are not so much to blame for their apparent shallowness as the investors who deal with them. People believe what they want to believe, and it is natural for those who are dependent for livelihood upon commissions from purchase and sale of stocks to give the investing public the kind of service it desires to have. Then too, brokers realize that their clientele constantly is changing. Each "bull" market brings new groups to the board rooms, and by the time they have learned their lesson, they either have lost all their surplus funds, or have learned that the stock market is not the easy place for making money that they imagined it to be. The wise ones also learn that the only sound method by which they can make money in stocks is to buy the best issues when they appear cheap and hold them. Therefor, the best method by which the cure for speculation may be attained is through education. This is a slow process, however, and, in view of the highly technical nature of finance and economics, it is not readily grasped. A scholar may learn through text books that stocks should be bought when they are cheap and sold when they

are high or "dear", but it is a different matter to apply this principle to actual practice. They again, the professor of economics may expound to his classes the truth of the laws of supply and demand, untility and value, prices and production, effect of credit upon business, but the young man or woman just entering business or professional life cannot be expected to grasp the full significance of these truths until they are directly influenced by them through the costly lesson of experience. Furthermore, the young man or woman in high school and college may be taught the principles of economics but subsequently enter a business or profession in which this kind of knowledge has little chance for practical application, so they forget nearly all they have learned about the subject. These factors, coupled with the wide differences in human nature, make the development of a more general knowledge of sound investment policies an extremely difficult matter.

Education in financial matters should embrace the form of financial statements, as well as an understanding of their meaning. Too frequently in the past investors have been mislead by false figures. This could be eliminated partly by uniform financial statements. Accountants have advocated this for some years. Of course, different kinds of businesses require statements suited to their particular needs. The accounting system of a mining or oil company would not be applicable to the manufacturing firm. The principal need,

are high or "few", but it is a different matter to apply this principle to actual practice. They again, the graduate of economics may expound to his classes the truth of the laws of supply and demand, utility and value, prices and production, effect of credit upon business, but the young man or women just entering business or professional life cannot be expected to grasp the full significance of these truths until they are directly influenced by them through the costly lesson of experience. Furthermore, the young man or women in high school and college may be taught the principles of economics but subsequently enter a business or profession in which this kind of knowledge has little chance for practical application, so they forget nearly all they have learned about the subject. These factors, coupled with the wide differences in human nature, make the development of a more general knowledge of sound investment policies an extremely difficult matter.

Education in financial matters should embrace the form of financial statements, as well as an understanding of their meaning. Too frequently in the past investors have been mislead by false figures. This could be eliminated partly by uniform financial statements. Several writers advocated this for some years. Of course, different kinds of businesses require statements suited to their particular needs. The accounting system of a mining or oil company would not be applicable to the manufacturing firm. The principal need,

however, is to require companies in the same industry to use similar accounting methods, so that the investor can make a better and more intelligent comparison between two companies of the same kind.

Closely allied with the above are the loose methods of many companies in reporting earnings to stockholders. In recent years there has been a tendency on the part of corporations to publish earnings quarterly, but some still cling to the old idea of publishing earnings but once a year. Present day business operation are so complex that much can happen in a year. "If the shareholder is, after all, the actual owner of the corporation, should he not have complete and accurate knowledge of the operations of his business", asks The Financial World, a weekly financial publication, "or should this information be reserved exclusively for the management, remembering that the latter are in reality the employees of the shareholder"?

There is little cause for complaint in the case of railroad reports and those of the larger utility companies, but in the case of many industrial corporations, particularly some of the most prominent ones, there still exists a tendency to make an annual statement tell as little as possible to the shareholders. To quote the Financial World again: "While in a surprisingly large number of cases the shareholder is left in complete ignorance as to the amount of gross business his

however, it is to [illegible] comparison in the [illegible] to use
similar accounting methods, so that the [illegible]
better and more intelligent comparison [illegible]
of the same kind.

Closely allied with the above [illegible]
[illegible] in reporting [illegible]. In
recent years there has been a tendency [illegible]
[illegible]
to [illegible]
and [illegible]
in a year. [illegible]
nature of the corporation, [illegible]
accurate [illegible] of the operations of the [illegible]
the [illegible]
should [illegible]
[illegible]
glimpse of the shareholder?

[illegible]
[illegible]
in the case of many [illegible]
some of the most [illegible]
up [illegible]
the shareholders. [illegible]
in a [illegible] large number of cases the shareholder is left
[illegible]

company is doing, many more of those corporation which do report sales, or gross earnings, lump under a single head and a single item all of those deductions which have been made in determining the amount of net earnings. The owner of the Company's stock is entirely justified in asking just what the item includes; the description 'operating expenses' depreciation, taxes, etc.' may give some clue, but the 'etc.' might mean almost anything. Perhaps part of the blame for the brevity and lack of actual information of some of the corporate reports is traceable directly to the shareholder himself, because of his apparent indifference". It is conceivable, however, that there must be a vast variation in the accounting method of the American Telephone & Telegraph Company, with assets of over four billion dollars, which reports annual earnings of $10 to $14 share per annum and the Archison, Topeka & Santa Fe Railroad, which has assets of around $1,500,000,000, but which reports earnings from $15 to $25 a share per annum. Certainly the largest public utility company in the world should have as large earnings per share annually as the premier railroad. These are some of the factors that investors have to contend with, so it is small wonder that figures often are confusing to those who do not know what their full significance is even under the most favorable conditions.

More general knowledge of financial matters and proper regulation also would prevent to a considerable extent "doctoring" financial statements under certain conditions. Just as some large corporations with huge earning power endeavor to cover up true earnings, others with declining earnings sometimes "juggle" figures to make them look better than they really are. This frequently is done when financing is being arranged, so that the new securities will look attractive to investors. It may also be attempted when the "insiders" want to get out before the majority of the shareholders learn that something is wrong with the outlook for a company. This may be regarded as one of the most vicious forms of propoganda, for the average investor has no means of determining the true from the false, and, in fact, neither can the experienced observer without more than the usual care in analyzing the statements. As a matter of fact, some very shrewd business men often have been fooled in this manner.

<u>The Future.</u> Our study has shown that the majority of people are so constituted mentally that they are not fitted for successful speculation, and for this reason most of them are destined to lose. It is recognized however, that the desire for gain has become so ingrained into human nature that it is futile to try to eliminate this factor from our present form of economic life. But it is conceivable that a good deal of improvement could be made in the public attitude toward

Some general practices of flagrant behavior [illegible]

[illegible] into this world pretend to a considerable extent. The-

[illegible] under various [illegible]. With

a [illegible] being [illegible] with [illegible] in order to

to [illegible] up and [illegible], [illegible] to-

tions. People [illegible] to make them less [illegible] than they

really are. This frequently is [illegible] is in-

[illegible], we find the [illegible] with [illegible]-

tive to [illegible]. It [illegible] is [illegible]

are [illegible] to [illegible] the majority of the [illegible]

learn that something is wrong with the [illegible].

This may be regarded as one of the most [illegible] forms of [illegible]-

ments, for the [illegible] has no share of [illegible]

the [illegible] from the [illegible], and, in fact, [illegible] and the [illegible]-

[illegible] character [illegible] than the [illegible]

the [illegible]. As a matter of fact, some very [illegible]

and other [illegible] in this manner.

The [illegible]. [illegible] that the majority of

people try to [illegible] that they are not [illegible]

for [illegible], and [illegible]

are [illegible] in [illegible]. He is [illegible], this is-

[illegible]

it is [illegible] than [illegible]

[illegible]. [illegible] as it [illegible]

of [illegible] would be one of the [illegible].

investment and speculation. Until it is recognized that the stock market is not merely a gambling place, but a market where one is able to buy an interest in the great industrial, railroad and utility enterprises in the country and throughout the world, losses will always be experienced by most of the stock market traders. Furthermore, it must be recognized that the only sound basis for expecting an improvement in the value of a stock over a period of years is the normal growth of the company it represents. Where the understanding of this truth ceases, speculation and gambling begins. Finally the stock market and business cycles are so fundamentally human in their characteristics that a knowledge of human nature is essential for the intelligent investment of surplus funds. Solon, Athenian sage and lawgiver, said, "Know Thyself". * This thought may be copied by the present day investor who would invest his money intelligently and wisely in a thorough understanding of the "human element in the security markets".

* Cyclopedia of Practical Quotations, page 509 dd.

----

APPENDIX

Page 39. Accountants and conservative investors regard 10 times earnings a fair valuation for a stock. That this theory is entirely disregarded during a speculative era, is shown by the following table of prices and earnings during the year 1929.

| Stock | High Price -1929- | Earnings Per Share |
|---|---|---|
| American Telephone | 310¼ | $12.57 |
| American Can | 184½ | 8.02 |
| American Tobacco | 232½ | 11.53 |
| Auburn Automobile | 514 | 21.23 |
| Borden Co. | 203¾ | 11.00 |
| Consolidated Gas, N.Y. | 182 | 4.75 |
| E.I.duPont de Nemours | 145¼ | 6.99 |
| Eastman Kodak | 264¾ | 9.57 |
| Electric Auto Lite | 174 | 11.37 |
| General Electric | 403 | 8.97 |
| General Motors | 91¾ | 5.44 |
| International Harvester | 142 | 7.11 |
| Johns Manville | 242¾ | 8.09 |
| Nash Motors | 118 7/8 | 6.60 |
| Otis Elevator | 333¾ | 15.96 |
| Public Service of N.J. | 124 7/8 | 3.93 |
| Standard Oil of N.J. | 83 | 4.75 |
| Standard Oil of N.Y. | 48 1/8 | 2.23 |
| United Fruit | 158½ | 6.78 |
| United States Rubber | 65 | Deficit |
| United States Steel | 261¾ | 21.19 |
| Western Union | 272¼ | 15.12 |
| Westinghouse Electric | 292 5/8 | 10.43 |
| Westinghouse Air Brake | 67¼ | 2.78 |
| Radio Corp. of America | 549 | 1.59 |

The above stocks, for the most part, are not highly speculative, but are the more seasoned issues. These stocks, therefore, represent the ones that are chosen by the investor element. A similar list of

the more speculative stocks, show an even wider ratio between market price and earnings, as follows:

| Stock | High Price -1929- | Earnings Per Share |
|---|---|---|
| Advance Rumely | 104 7/8 | Deficit |
| American Republics | 64¾ | " |
| American Zinc | 49¼ | $0.16 |
| Best & Co. | 123½ | 4.20 |
| Briggs Manufacturing | 63 1/8 | 1.21 |
| Brockway Motor | 73 7/8 | .54 |
| Chrysler Motor | 135 | 4.94 |
| Curtiss Wright Corp. | 30 1/8 | Deficit |
| Davison Chemical | 69 1/8 | 3.34 |
| Foundation Co. | 69 5/8 | 1.95 |
| Hahn Department Stores | 56¾ | 1.85 |
| Hayes Body Corp. | 68 3/8 | Deficit |
| Grigsby Grunow | 70 | .87 |
| Houston Oil | 167 | 4.78 |
| Kolster Radio | 78¾ | .20 |
| Int'l. Paper & Power A | 44½ | Deficit |
| Int'l. Combustion Engr'ng | 103½ | " |
| H.R.Mallinson Co. | 39 3/8 | " |
| Mexican Seaboard Oil | 69 3/8 | .02 |
| Moto Meter Gauge & Equip. | 35 3/8 | .31 |
| Murray Corp. of America | 100 7/8 | 1.69 |
| National Bellas Hess | 234 | Deficit |
| J.C.Penney Co. | 105¼ | 4.50 |
| Simmons Co. | 188 | 4.15 |
| United Electric Coal | 81 1/8 | 2.24 |

Pages 47,62,67,69,76,81,83. In order to show the relationship between daily occurrences and stock market activities, the following events and comments are listed from newspaper stock market reports in the years 1929 and 1930. These two periods have been chosen because they more accurately reflect the type of events that are given greater consideration during the last stages of an upward movement and in the latter stages of a downward movement.

January 1, 1929. United States Rubber was one of the strong features, advancing 4 points, on reports that du Pont interests were becoming identified with the company.

January 11. The New York Traction stocks were strong due to reports that these companies would be granted an increase in fares from 5 cent to 7 cents. Interboro Rapid Transit gained 3 points. These rumors later proved false and the stocksdeclined.

January 21. Utility stocks were strong, reflecting rumors of pending mergers. Electric Bond & Share advanced 6 points and Am. Super Power A 9 points.

January 28. Reflecting report of a recapitalization plan, Electric Bond & Share was extremely

active. The first sale for the day was 20,000 shares at $274\frac{3}{4}$, an advance of 49 points from the previous close. The stock closed at 256, with a gain of 30 points for the day.

February 4, 1929. New flight of Colonel Lindburgh to Cuba and South America caused a rise in the airplane stocks. Wright Aeronautical Corp. stock advanced 9 points, and Curtiss Aeroplane & Motor gained 10 points.

February 7. The stock market dropped sharply due to stern warning of the Federal Reserve Board regarding use of member bank credit for speculation. As a result of the day's trading, the Dow Jones industrial average dropped 11.43 points.

There comes a time in an upward movement when good news fails to have a stimulating effect upon stocks. This was shown on March 22, 1929, when the price of copper metal advanced to 23 cents a pound. Despite this development, however, the copper shares remained practically unchanged. On April 13, the coppers were sold freely when the price of the metal declined.

This also was noticeable in the motor group during April of 1929. Comment in the column of Arthur J. Bean, financial editor of the Boston Post, on April 11, 1929, was as follows: "The motor stocks are acting far from well. While there is no acute weakness, they fail to participate

action. The stock high for the day was [illegible] points

at [illegible], an advance of 45 points from the previous close.

The stock closed at [illegible], with a gain of 32 points for

the day.

February 4, 1929. [illegible]

in Chile and South America caused a [illegible] in the [illegible]

stocks. [illegible] points,

and [illegible] declined [illegible] points.

February 7. The stock market declined sharply due to stern warning of the Federal Reserve Board regarding use of member bank credit for speculation. As a result of the Bank's [illegible] the New York [illegible] average dropped [illegible] points).

There comes a time in an upward movement when good news fails to have a stimulating effect upon stocks. This was shown on March 22, 1927, when the price of copper which advanced to 15 cents a pound. Despite this development, however, the copper shares remained practically unchanged. On April 20, the copper stock sold lower when the price of the metal declined.

This also was noticeable in the radio group during April of 1929. [illegible]

[illegible] April 13, 1929, [illegible]

as follows: [illegible]

[illegible]

in rallies and slip off rather easily in reactions".

May 2, 1929. General Electric stock was strong, advancing $9\frac{1}{2}$ points on a report that the stock would be split.

May 7. Radio Corp. stock was weak, losing 6 points when earnings of 35 cents a share for the first quarter were published.

May 8. American Sugar Refining stock advanced 4 points, reflecting announcement that the stock had been placed on a $5 annual dividend basis.

May 9. Criticism of the Federal Reserve Board by the President of the New York Stock Exchange caused a wave of confidence. The attitude of the professional operators was described as "cocky", and as a result of the day's trading the Dow Jones industrial average rose 4.53 points.

May 14. Packard Motor stock advanced 14 points on the announcement that a successful test flight had been made with an airplane using the company's new Diesel Engine.

May 16. Strength in the Tobacco issues was accompanied by rumors that the manufacturers would soon raise the price of cigarettes. American Tobacco rose 3 points, Liggett & Myers 2 points and Lorillard 3 points.

May 21. The stock market failed to respond to favorable decision of the U. S. Supreme Court on the St. Louis & O'Fallon Railway rate case. This decision was

regarded as vital to the railroads in that it placed the valuation of the railroads for rate making purposes at current reproduction costs, instead of 1913 values.

May 23, 1929. Arthur J. Bean, financial editor of the Boston Post, said, regarding an expected increase in the rediscount rate: "A 6% rediscount rate would, perhaps, be largely psychological, inasmuch as the commercial money market has been at or above this level for some time".

May 27. Mail order stocks were weak, reflecting lower grain prices, and the effect this would have upon the purchasing power of the farm industry. May wheat dropped to 98 5/8 cents a bushel. Montgomery Ward and Sears Roebuck each declined 5 points.

June 13, 1929. Strength in the public utilities attributed to the fact that half a dozen powerful groups of public utility interests were competiting actively in buying companies over a wide area.

June 21. Arthur J. Bean, financial editor of the Boston Post, commenting on the speculation in public utilities, said: "In one respect the big speculation in the public utilities resembles the Florida land boom. Very few now try to do any figuring as to earnings or values. Based on earnings around $6 per share, Consolidated Gas is one of the cheapest of the public utilities at around 125 in spite of its rise. Yet there are many other issues

regarded as vital to the railroads is that an adequate [illegible]
valuation of the railroads [illegible] neither [illegible]
[illegible] reproduction [illegible] instead of [illegible]

May 12, 1922. Arthur J. Dunn, [illegible] editor of
the Boston Post, said, regarding an expected increase in
the railroad rates: "I [illegible] rate would, perhaps,
be largely psychological," [illegible] on the [illegible]
market has been [illegible].

May 27. [illegible] wheat [illegible]
lower grain prices, and the effect this would have upon the
purchasing power of the farm [illegible]. The wheat dropped
to 98 1/2 cents a bushel. [illegible] and [illegible]
buck each declined 3 points.

June 12, 1922. [illegible] in the public utilities
attributed to the fact that half a dozen [illegible] groups
of public utility interests were concentrating [illegible]
buying [illegible] over a wide area.

June 15. Arthur J. Dunn, financial editor of the
Boston Post, commenting on the speculation in public util-
ities, said: "It was natural that the speculation in the
public utilities [illegible].
[illegible]
[illegible]
[illegible] of the public utilities [illegible]
[illegible]

earning one-half this amount per share which are selling higher than Consolidated Gas. Of course, the utility situation is in the throes of consolidation where less duplication of expenses and expansion may make radical improvement in earning power, but the average speculator is in no position to know what companies are in a position to increase earnings sharply. Some well-informed public utility interests have told the writer that they are entirely unable to visualize earnings to warrant present prices for many of these issues".

June 27, 1929. The aircraft stocks were sold freely on the announcement of an amalgamation of Wright, Curtiss and other important units. Wright Aeronautical dropped 8 points and Curtiss 3 points.

July 8, 1929. Sharp rise of 4 points in Columbia Graphophone was accompanied by a rumor that an important deal might be consummated within a few weeks. The fact that the stock had the backing of J.P.Morgan & Co. lent additional speculative value to the rumor.

July 11. American Tobacco rose 4 points on report that stock was to be split 2 for 1.

July 18. Rise of 2 points in U S Steel points, was due to continued high rate of production during the summer months, ordinarily a period of lower operations.

July 31. General Electric reached a new high for

all time, gaining 10 points to $377\frac{1}{2}$, based on expectations that a split of the stock would be announced shortly.

August 1, 1929. Reported pool operations in Gillette Safety Razor caused the stock to advance 8 points. Fantastic predictions as to price stock would sell for in a short time were circulated.

August 6. Stock market was easier because of rumor that Secretary of the Treasury Mellon was considering retiring from active service.

August 7. Sharp rise in Atchison Topeka & Santa Fe Railroad stock to above 270 was accompanied by the rumor that the company would capitalize its large surplus by a stock dividend of 50% or more.

August 9. Stock market experienced a severe break, reflecting the raise in the rediscount rate of the Federal Reserve Bank of New York from 5% to 6%. The Dow Jones industrial average dropped 14. points, the railroad average 4.73 points and the copper average 3.30 points.

August 13. Arthur J. Bean, Financial Editor of the Boston Post, commenting on the position of the stock market, said: "The mental attitude of speculators the country over is an interesting study at the present time. Most of them seem pretty well convinced that nothing can stop the upward movement. The situation has gotten beyond the point where money rates are of much influence. The conservative element

look upon this as a dangerous situation, but the active bulls point to the stocks which are moving and refer to their sponsors".

August 14, 1929. One of the features in the market on this date was Gillette Safety Razor stock which rose 8 points to 136, a new high. The rise was attributed to "pool" activities.

August 16. The oil stocks were strong, accompanied by a rumor that the Morgan interests would soon launch a huge oil investment trust, as well as favorable reports relative to the stabilization of the industry.

August 19. News on this date hinted quite definitely that distribution was in process. A number of market students were mentioned as believing that spectacular movements in a comparatively few issues was for the purpose of effecting distribution.

September 3, 1929. The Dow Jones industrial and railroad averages reached the high point for the bull market on this date, the former being 381.17 and the latter 189.11. From this date until November 13, the market continued to decline interrupted by periods of strength. The industrial average on that date was 198.69.

September 16. *Comment on the stock market on this date was as follows: "The stock market has reached a point where enthusiasm must be kept up in order to keep up prices. As soon

* Financial Editor's Notes, Boston Post.

[illegible] a dangerous element, [illegible]
[illegible]
[illegible].

August [illegible], 1890. [illegible]
[illegible]
[illegible]
[illegible].

August 26. The old steamboat [illegible]
[illegible]
[illegible]
[illegible].

August 31. [illegible]
[illegible]
[illegible]
[illegible]
[illegible].

September 5, 1890. [illegible]
[illegible]
[illegible]
[illegible]
[illegible]
[illegible].

October [illegible]
[illegible]
[illegible]

[illegible]

as the market starts to lag the selling increases. Of course, the psychology of this situation is that a great many speculators have the idea that some day the market is going to take a big drop, but the market has fooled them so long that they are willing to go with the tide, until definite signs of recession appear".

October 3, 1929. Decline in the market on this date was characterized as the worst since early in 1926, when publishing of the brokers' loans for the first time brought about a sharp decline. The industrial "average" was down 14.55 points. Comment on the market stated that "Distressed selling was the feature of the market during the last hour and no respect was paid to values".*

October 19. *Stock market reports on this date said: "The market indicates that is is reaching the last stages of the liquidating movement. Frightened selling in the last hour yesterday was the feature. Of course it is impossible to tell how far the movement will go especially after such a long period of active speculation for the rise. In downward movements, stocks often sell below their value just as they rise above their value during bull movements".

October 21. Over 6,000,000 shares changed hands on this date, and it was estimated that over 80% of the selling was on the part of those who were either frightened into selling or were forced to sell by their brokers.

* Financial Editor's Notes, Boston Post.

as the market shares up but the situation persistent. Of course, the percentage of this situation is very large. Many speculators have the idea that the market is going to make a big move, but the market has fooled them so long that they are willing to go with the crowd, which indicates signs of speculative pressure.

October 8, 1929. Decline in the market on this date was characterized as the worst since early in 1929, when liquidation of the brokers' loans for the first time brought about a sharp decline. The industrials' averages went down 13.32 points. Largely on the margin selling [illegible] willing but the feature of the market during this week has had no recovery and tone of rebound.*

October 19. Financial Chronicle reports on this date said: "The market indicates that it is undergoing the last stages of the liquidating movement. Professional selling in the last hour yesterday was the feature. Of course it is impossible to tell how far the movement will go especially after so long period of active speculation for the rise. It seems more interesting, whether after will take place [illegible] when stocks [illegible] their value [illegible] full movement."

October 21. Over 6,000,000 shares changed hands on this date, and it was estimated that over 60% of the selling was on the part of those who were forced to liquidate their holdings or were forced to sell by their brokers.

* Financial Editor's Report, Boston Post.

October 24, 1929. The industrial average on this date declined 20.66 points, and reports on the market stated: "We are witnessing the same mob psychology on the down side that was witnessed months ago on the up side when the most ridiculous prices were freely predicted. At that time there seemed no limit to public demand, now there seems no limited to the distressed selling."*

October 29. Selling reached its apex on this date, when 16,410,000 shares changed hands. Brokers worked all night in an effort to keep up with the huge volume of business.

October 30. Stock market had a sharp rally, with volume of trading at 10,727,300. A good deal of the buying was attributed to investment buying, by those who desired to get stocks at low prices.

November 13. On this date, when the lows for the 1929 decline were attained, a bid for 1,000,000 shares of Standard Oil of New Jersey at 50 was reported. This had a stimulating effect on the market the following day, because it indicated that banking interests were prepared to support the market.

As a result of this movement the market rallied 18.59 points on the following date, Nov. 14. and continued to advance with intermediate declines until April 17, when

*Financial Editor's Notes, Boston Post

the industrial average reached 294.07

The following items, taken from newspaper reports in the latter part of 1930, indicate the changed attitude on the part of speculators, as compared with 1929. It will be noted that more attention is given to unfavorable reports.

June 4, 1930. United States Steel declined nearly 3 points due to report of decreased steel operations.

June 11. Financial comment on this date was as follows: "If one listened to the gloomy talk of those speculators who were so bullish last year at the top of the market, he would be led to belief that depression was normal and good business abnormal. As a matter of fact, depression is abnormal and, therefore, cannot long endure. Of couree, we cannot expect that the rank and file of speculators will buy near the bottom or sell around the top. This never has happened, and never will".*

June 16. Missouri Kansas Pipe Line was one of the sensational features on the decline, dropping 15 points. The reason given for the abrupt decline was that the stock had been "pegged" during its advance and that this was accompanied by countrywide selling of the stock. Selling became so urgent that the sponsors were unable to continue supporting it.

July 3, 1930. Comment on the dull, sagging market of this date was as follows: "Special weakness in a few issues

* Financial Editor's Notes, Boston Post.

when the market is in the bottom area are the reverse of those upward rushes when the market is in the top area. During both extremes the market gives a wrong impression. At the top it seems as though all prices were going skyward, but the average of the market does not get anywhere. On the other hand while some stocks look very weak at present, the market as a whole does not decline much."*

July 28, 1930. Warner Bros. Pictures stock declined 3 points on report that dividend would be cut or paid in scrip..

August 1. Marked weakness in Consolidated Gas, Public Service Corp. of New Jersey and other public utility stocks was attributed to selling by interests who expected a reduction in electric light and power rates in New York City and in other cities, coincident with the reduction in rates ordered in Boston

August 6. Stock market reactionary on possible effect of the hot weather on the corn crop. The Dow Jones industrial average declined 4 points.

August 7. Chicago, Rock Island & Pacific Railroad stock declined nearly 4 points and Southern Railway 4 points due to the belief that lessened crops would reduce the tonnage of these roads in the following months.

*Financial Editor's Notes, Boston Post

August 12, 1930. Arthur J. Bean, financial editor of The Boston Post, commenting on the psychological attitude of speculators, said: "The writer has seen people thoroughly frightened many times during depressions, but it does not seem as though there are more people scared now than ever before. Perhaps it is because so many people now are interested in the stock market".

August 15. Stock market rallied sharply on news from chief agricultural centers that the drought had been partially broken. The industrial "average" gained 7.47 points.

August 18. Fox Film declined 5 points because of rumors that the dividend would be cut or passed. Decline also partly attributed to professional "bear" operations.

August 22. American Tobacco B. advanced over 5 points, reflecting the announcement that sales of "Lucky Strike" cigarettes for the month of July had established a record to that date.

August 28. Goodyear Tire & Rubber stock declined about 3 points following the announcement that wages of executives, sales and office forces would be cut 10 per cent. Comment on this action was as follows: "There was a time when such a development would be considered bullish, but the financial community has changed its opinion concerning the effect of wage reductions."*

September 13, 1930. Comment on attitude of the public

* Financial Editor's Notes, Boston Post.

toward the stock market on this date was as follows: "The psychological effect of reactions upon close followers of the market after a long period of depression is interesting. Speculators have been through so much that even a small technical decline will cause them much worry."*

September 26. Financial reports on this date read: "Brokers say that most of the selling for customers is not of the distressed sort, but is largely for small holders whose nerves have been so frayed by the many discouraging reactions that they have sold out, vowing never to buy stocks again. At this stage of the market it is easy to see why bull movements following depressions have to go a long way before the speculative public again is enticed into the market."*

October 3, 1930. "Bear" operators tried to upset the market by special pressure on a few issues, namely Montgomery Ward, Radio and Southern Railroad, which were moderatly lower.

October 8. Interesting comment upon the type of individuals who buy stocks after a decline was reflected in the financial editor's notes of the Boston Post on this date, as follows: "A wealth investor who bought 20,000 shares of stock in yesterday's break said to the writer: 'I am buying stocks, not because I think business may pick up this year. I am buying them because at their present prices practically all

* Financial Editor's Notes, Boston Post.

toward the stock market at this time was as follows: "The psychological effects of recovery upon stock followers of the market after a long period of depression is interesting. Speculators have been through so much that even a small technical decline will cause them much worry."*

September 29. Financial Reports on this date said: "Traders are that type of the public [illegible] of the aforementioned sort, but it is largely the small holders whose nerves have been so frayed by the many disconcerting questions that they have sold out, waiting [illegible] to buy stocks again. At this stage of the market it is easy to see why bull movements following depressions have to go a long way before the speculative public again is enticed into the market."*

October 2, 1930. "Bear" operators tried to upset the market by special pressure on a few issues, namely Montgomery Ward, Nash and Southern Railroad, which were generally lower.

October 3. Interesting comment upon the types of the individuals who buy stocks after a decline was reflected in the Financial Editor's notes of the Boston Post on this date, as follows: "A wealthy investor who bought 10,000 shares of stocks in yesterday's break paid an interesting [illegible], and because I think bargains may give up this year. I am buying them because at their present prices practically all

* Financial Editor's Notes, Boston Post.

stocks have discounted poor business for many months to come'".

October 10, 1930. Sensational drop in Fox Film from 38 to 29 and an equally sharp rebound to 37 was duplicated by several other issues, the inference being that some large interest was forced to throw over a huge amount of stock.

October 23. "A broker made a canvass of his board room yesterday and found 22 bears, 15 bulls and one customer 'on the fence'. He said that the bears were much more confident of their position, however, than the bulls, and added 'This is the best indication that we are near the bottom that I have seen for some time' ".*

October 30. Directors of Bethlehem Steel declared the regular quarterly dividend of $1.50 per share on the common stock. Despite this action, however, the stock declined 1¼ points, indicating the pessimistic attitude of speculators near the bottom of a declining movement.

October 31. Gillette Safety Razor declined 2½ points and Autostrop Safety Razor 4 points in response to a suit brought by stockholders asking for redress for the action of the directors in permitting the Gillette Company to buy its own stock.

November 3, 1930. Monthly letter of the National City Bank of New York expressed the opinion that "There can be little doubt but that the depression in this country is scraping on bottom". Despite this and similar statements, however, the stock

* Financial Editor's Notes, Boston Post.

market declined 5.58 points on the average on Nov. 5. and reached the low point for the "bear" market on Dec. 17, when the industrial average was 157.51.

November 17, 1930. Stock market was weak due to reports of bank failures in Illinois, Missouri, Arkansas and Kentucky, bringing number of failures up to 19 in three days.

December 2, 1930. American Woolen preferred gained 4 points, reflecting reports that conditions in the industry were improving. Commnet on the rise in this stock said: "Incidentally, this event called renewed attention to the way different groups of stocks have come forward in recent weeks, reflecting slight business improvement. At first it was the coppers, then the motors and rubber stocks. Yesterday the steel stocks and the biggest unit in the woolen trade were prominent".* This is an illustration of the tendency on the part of farseeing investors to buy stocks when they believe the turn is near.

December 5. German bonds were strong for the first time in many weeks, advancing 2 points. Previously these bonds had been weak due to the fear that a moratorium might be declared.

December 11. Stock market declined on the Bank of United States in New York had failed. Industrial average declined 3.67 points.

* Financial Editor's Notes, Boston Post.

December 16, 1930. Industrial average declined 5.83 points to the year's low of 157.51. Arthur J. Bean, financial editor of the Boston Post, made the following comment: "There has been a good deal of selling by people who do not have to do so, and ought to know better than to sacrifice their property. The reason for this is that there has been an undercurrent of feeling, born of the vicissitudes of the past year, that somehow this depression is unlike others we have had, and that the outlook is therefore more hopeless. It is the same psychology reversed, which was noted at the top of the boom, when so many people thought that 'conditions were different'. If there is any one thing that a study of economics over the centuries reveals, it is that there is absolutely nothing new under the sun. It is because of this hopeless feeling today that stocks are all but being given away. The psychology of the present hour is perilous to those who are swayed by it".

Following this low point the stock market recovered and the improvement helped to dispell a good deal of the gloom that was widely prevalent at the low point.

The years 1929 and 1930 offer an excellent opportunity for the student of stock market and business psychology to learn how events, emotions and depressions effect security prices. The World Almanac, in its financial and economic review for 1930, also mentions some of the human elements which the events of the

December 15, 1932. [illegible]

[illegible] points in the year's low of [illegible]. [illegible]

[illegible] editor of the Boston [illegible]

comment: "There has been a [illegible]

[illegible]

[illegible] their properties. [illegible]

has been an improvement of quality, [illegible]

of the panic years, [illegible]

[illegible], and that the outlook is [illegible].

It is the same psychology, [illegible]

of the [illegible]

difference'. If there is any [illegible]

[illegible]

[illegible] nothing new under the sun. It is the result of [illegible]

[illegible] feeling [illegible] that people are all [illegible].

The psychology of [illegible]

except in it".

Following [illegible]

[illegible]

[illegible]

The years 1931 and 1932 [illegible]

the studies of stock market and business [illegible]

[illegible]

[illegible]

[illegible]

year revealed. The review says in part: "At the close of the year, with eighteen months of depression endured, with the bulk of speculative wreckage apparently cleared away, with stock prices rolled back, at their lowest, to early 1927 levels, with commodity prices not far above the pre-war basis, the economic position appeared for the first time to have become genuinely and inherently hopeful, due to the very thoroughness of the readjustment. Looking forward to future revival, the strongest investment buying of a decade made its appearance. Paradoxical as it may seem, the 1929-1930 speculative debacle has done more than anything else to further the popularity of common stock investment on the part of the American people. The misfortunes of speculative sellers have resulted in an unprecedented transfer of stock to outright owners, with the result, interesting both in its social and economic possibilities, that more millions of Americans are shareholders than ever before".*

* The World Almanac and Book of Facts, 1931, page 141.

Bibliography of

THE HUMAN ELEMENT IN THE SECURITY MARKETS


| | |
|---|---|
| Pages 3,4,7,9,32 | The Work of the Stock Exchange<br>By J. Edward Meeker, M. A.<br>Economist to New York Stock Exchange<br>Published by the Ronald Press Company.<br>1922 and 1930, New York |
| Pages 7,29,77 | New York Stock Exchange Year Book, 1929-1930<br>Compiled by Committee on<br>Publicity of the New York<br>Stock Exchange, 1930 |
| Pages 14,44 | Twenty-Eight Years in Wall Street,<br>By Henry Clews<br>Published by Irving Publishing Co.<br>New York 1888. |
| Page 25 | The Year in Wall Street Since the Break,<br>By Eugene M. Lokey, in New York Times<br>October 26, 1930. |
| Pages 25,40,43,55<br>71 | Principles of Economics, Volumes 1 and 11<br>By F. W. Taussig, Henry Lee Professor<br>of Economics in Harvard University<br>Published by The MacMillan Company<br>in New York, 1920. |
| Page 30 | Harvard Business Review, October 1930.<br>Edited by Carl F. Taeusch.<br>Published by McGraw-Hill Book Co., Inc.<br>New York City. |
| Page 34,35 | Boston News Bureau,<br>Hugh Bancroft, Publisher<br>Edition of November 22, 1930 |
| Pages 44,49,50,51<br>55,63,66,69 | Professor Chamberlin's Lectures<br>on Principles of Industrial and<br>Commercial Psychotechnics, 1928-1929.<br>Boston University, College of Business<br>Adminstration |
| Page 58 | Truth of the Stock Tape,<br>By W. G. Gann<br>Published by Financial Guardian<br>Publishing Co. New York 1923. |

| | |
|---|---|
| Page 84 | Forecasting Stock Market Trends,<br>By Kenneth S. Van Strum,<br>Published by Barron's National Financial Weekly, New York, 1927 |
| Page 97 | Cyclopedia of Practical Quotations,<br>By J. K. Hoyt,<br>Published by Funk & Wagnalls Co.,<br>New York, 1896. |
| Page 116 | The World Almanac and Book of Facts, 1931<br>Published by "The World," New York |
| Page 41 | The Encyclopaedia Britannica,<br>Eleventh Edition,<br>Published by The Encylopaedia Britannica Co., New York, 1910 |
| Pages 101,103<br>105,106<br>107,108<br>109,110,<br>111,112. | Boston Post, Extracts from Financial Editor's Notes, 1929-1930<br>By Arthur J. Bean,<br>Richard Grozier, Editor & Publisher. |
| Page 42 | Psychology<br>By William James,<br>Published by Henry Holt & Co.,<br>New York, 1892. |
| Page 80 | Main Street and Wall Street<br>By William Z. Ripley<br>Published by Little, Brown & Co.<br>Boston 1927. |